STATE OF WISCONSIN
COURT OF APPEALS
DISTRICT I

Case No. 2012AP002547 - CR

STATE OF WISCONSIN,
Plaintiff-Respondent,
v.

MICHAEL L CRAMER,
Defendant-Appellant.

ON APPEAL FROM A JUDGMENT OF CONVICTION AND SENTENCE ENTERED IN THE CIRCUIT COURT FOR MILWAUKEE COUNTY HONORABLE KEVIN E. MARTENS, PRESIDING, AND AN ORDER DENYING POSTCONVICTION RELIEF ENTERED IN THE CIRCUIT COURT FOR MILWAUKEE COUNTY, THE HONORABLE JEFFREY WAGNER, PRESIDING

BRIEF AND APPENDIX OF DEFENDANT-APPELLANT

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ISSUES PRESENTED

I. Is Michael Cramer entitled to an evidentiary hearing because his postconviction motion alleged sufficient basis to support a claim that the State presented demonstrably false and misleading testimony at trial that violated Mr. Cramer's right to due process.

The circuit court answered: No.

II. Is Michael Cramer entitled to a *Machner* hearing because his postconviction motion made a sufficient showing that trial counsel was ineffective.

The circuit court answered: No.

III. Is Michael Cramer entitled to a new trial in the interest of justice.

The circuit court answered: No.

POSITION ON ORAL ARGUMENT AND PUBLICATION

The briefs of the parties should fully present the issues on appeal and develop the relevant theories and legal authorities. Therefore, the defendant-appellant does not believe oral argument is necessary.

Publication is not requested.

STATEMENT OF CASE

February 21, 2009, complaint filed charging Michael L. Cramer with abuse of a child.(2).

February 27, 2009, following a waiver of the preliminary hearing, Cramer was bound over for trial. The information was filed and Cramer pled not guilty.(53: 3).

January 7, 2010, amended information filed charging Cramer with first degree reckless homicide.(17).

April 2, 2010, Cramer pled not guilty to amended charge.(60: 2).

April 26, 2010, second amended charge of first degree reckless homicide alleging behavior occurred on February 17, 2009 and death September 1, 2009. Cramer pled not guilty.(23;61 3).

April 26-30, 2010, jury trial. 60,61,62,63,64, 65, 66, 67, 68)

April 30, 2010, Cramer found guilty.(68: 5 ;29)

June 15, 2010, Cramer was sentenced to ten years nine months confinement and eight years nine months extended supervision, the Honorable Kevin Martens presiding.(37; 69: 64).

September 4, 2012, Cramer filed a timely motion for postconviction relief.(43).

November 2, 2012, Cramer denied postconviction relief, the Honorable Jeffrey Wagner presiding.(49).

November 19, 2012, Cramer filed a timely notice of appeal.(50).

FACTS

On February 17, 2009, Michael Cramer called 911 to report his two month old son was non-responsive.(63:35) Emergency Medical personnel arrived a short time later and found Matthew Cramer to be a pulse-less non-breather. (Id). They were able to resuscitate Matthew to get a heart beat and transferred him to Wisconsin Children's Hospital where he was placed on life support.(63:38, 127) Matthew died on September 1, 2009, when he was removed from life support.(63:127).

The EMTs made no notation of any evidence of trauma on Matthew's body.(65:110) However, Fire Captain Stephanie Hampton, who arrived while EMTs were working on Matthew testified that she saw bruises on Matthew's upper body and leg.(63:37,44). Nevertheless, she did not document that in any report.(65:109).

Michael Cramer's explanation to police

While Matthew was taken to the hospital, Michael Cramer was taken to the police department where he told police his version of what had happened. He said that he had been in living room on couch with Matthew when Matthew became fussy.(63:175). Cramer fixed bottle for the child Matthew was still fussy so Cramer fixed second bottle.(Id). The baby took half of the second bottle and

was still fussy.(Id). Cramer tried to burp Matthew on his knee but Matthew did not burp.(Id). Cramer laid Matthew on couch face down and went to take shower.(Id). He returned ten to fifteen minutes later.(63:176). Matthew was still lying on couch face down; Cramer sat down next to him and used his hand to move Matthew over.(63:177). Matthew seemed unconscious.(Id.) Cramer took hold of Matthew; Matthew was limp - there was no muscle tone. (Id.) Cramer looked for respirations at his chest but did not see any.(Id.) He detected a faint heart beat.(Id). He started CPR - pinching the child's nose and blowing into his mouth while administering chest compressions with a hand just below the chest and just above diaphragm (Id) At one point formula came out of Matthew's mouth.(63:178). Cramer did eight compressions before he called 911.(Id.) He was told to continue CPR.(63:73).

Detective Ronald Taylor arrested Cramer because Taylor was in communication with doctors at the hospital who said Matthew's injuries were inconsistent with Cramer's story.(63:66)

Detectives confronted Cramer about the fact that doctors said there had been trauma to Matthew.(63:73) Cramer said the only thing that he could think of was that he tried to arouse Matthew when he found him not breathing and unresponsive and then he started CPR.(63: 73-74).

Dr. Thomas Valvano's testimony

While at the Wisconsin Children's Hospital, Matthew was seen by Dr. Thomas Volvano, a child abuse pediatrician(64:17) While the EMT record and the Emergency Room record do not mention any external signs of trauma, Dr. Valvano testified that he saw bruises

on Matthew's left arm and around his left knee.(Valvano Tr. 64: 83). Other than that, there is no suggestion that Matthew had any external signs of injury and at the time of autopsy had no signs of fractures (Tlomak 65: 33).

Although, Matthew had no evidence of external injury on his skull and there were no bruises or abrasions, on his skull or neck, Dr. Valvano opined that Matthew had sustained abusive head trauma which was the result of infliction of significant force - not the result of accidental injury.((Valvano 64:87, 57).

According to Dr. Valvano, the CT scan showed Matthew had bilateral (both sides of his brain). subdural hemorrhages over the front part of his brain.(Id. 39). Valvano said Matthew had small subarachnoid hemorrhaging in the back of his head.(Id. 42). Valvano explained that bridging veins that leave the brain and pierce through the dura can break and cause bleeding into the arachnoid. (Id).

According to Dr. Valvano, an MRI performed a few days later showed swelling in the brain, small petechial hemorrhages[1] within the brain tissue itself, and abnormal intensity around the brain stem.(Id. 44-45). According to Valvano Matthew also had extensive retinal hemorrhages in both eyes throughout the retina - in front and behind the retinal extending all the way out to the edge of the retina.(Id. 54, 55).

Dr. Valvano said that there was, at the base of the neck where the back begins, a swelling and an extra dural collection of blood - a very focal injury which was according to Valvano, another example of trauma.(Id.

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[1] Pinpoint bleeds (Id. 50).

56)

Dr. Valvano testified that the injuries seen on Matthew resulted from rotational acceleration, deceleration kinds of forces.(Id. 65,69). Valvano described those forces as moving the baby's head through an arc–

> "because someone throws the baby down or throws the baby across the room or bangs the baby's head against something or hits the baby's head against a soft cushion or shakes the baby or a combination of those things, the head moves back and forth."

(Id. 65-66).

Dr. Valvano also said that the force from the movement through the arc

> "stretches the bridging veins ... so that the brain is twisting around inside the skull those veins stretch and break and then bleed into the spaces around the outside of the brain.
>
> " And this injury to the brain affects the entire brain, and that is why we see the damage to the brain throughout the brain bilaterally, and that's why we see the hemorrhages not jut in one little area but on both sides of the brain."

(Id. 67-68).

Dr. Valvano testified that the force also affected the eyes.

> "As the eye is moving, that vitreous pulls away from the retina, and we think that that's what causes those retinal hemorrhages. And when you look at the pattern of retinal hemorrhages that Matthew had, those hemorrhages that are all the way out to the periphery, very extensive, you only see that pattern of retinal hemorrhages in either abusive head trauma-- and it's highly associated with abusive head trauma -- or in certain specific cases of severe accidental trauma. For

example, fatal motor vehicle accidents.

"So infants and children who have been involved in fatal motor vehicle accidents have been shown to have a similar pattern of extensive retinal hemorrhages as infants subjected to abusive head trauma.

"And you can imagine why that's the case because in a fatal motor vehicle accident you also have that same kind of acceleration deceleration forces going on.

"We also in this case saw trauma to Matthew's neck, which is again consistent with this sort of hyper-extension flexion of the neck during these acceleration deceleration forces.

"And so all of that picture fits together, and the only unifying diagnosis for that, for all of these injuries is trauma and specifically this type of rotational trauma, rotational trauma to the head. And that really explains all of Matthew's various injuries."

(Id 68 -69).

Indeed, Dr. Valvano opined that Matthew was a classic case of abusive head trauma because he had "extensive diffuse brain injury, this particular pattern of retinal hemorrhages, these bilateral subdural hemorrhages."(Id. 70). According to Valvano, his injuries could not have been caused by an accidental fall.(Id:74). He justified that conclusion by pointing out that accidental falls had been studied extensively in hospitals.(Id. 74-75). According to Valvano, any accidental injury would be focal and limited to the area of impact and would not give the bilateral subdural hemorrhages or diffuse brain injury that Matthew had.(Id.75).

With regard to the fact that Matthew had no external signs of trauma on his head Dr. Valvano

asserted,

> "That does not mean that there was no impact against, for example, a cushion like a mattress or a sofa cushion or a chair cushion, and they won't leave external signs of injury necessarily. But that's still a force from sudden deceleration that gets transmitted to the brain and that injures the brain even though it leaves no external signs of injury."

(Id. 89).

On cross examination, Dr. Valvano denied that there was any real dispute that shaking a baby could cause abusive head trauma.

> There is no controversy outside of the courtroom. The American Academy of pediatrics, pediatricians, neurosurgeons, it's well accepted that violently shaking a baby causes injury to that baby. And outside of a few limited numbers of physicians, most of whom appear as defense witnesses, there is really no controversy.

(64: 91).

When asked about biomedical modeling research showing the amount of forced needed to injure the a child's brain, Dr. Valvano dismissed the biomedical modeling as being very crude.(Id. 93).

Dr. Valvano testified that it takes significant violent force to cause traumatic brain injury to children but we can not put a number on it.(Id. 95).

Dr. Wieslawa Tlomak's testimony

The state also presented the testimony of Dr. Wieslawa Tlomak, who works at the Milwaukee County Medical Examiner's Office.(Tlomak: Id. 104).

Dr. Tlomak performed an autopsy on Matthew Cramer on September 2, 2009, about six- and- a- half months after Matthew collapsed .(Tlomak 65:5). Tlomak opined that the cause of Matthew's death was a complication of blunt force injuries of the head.(Id. 6).

Dr. Tlomak asserted that the fact that she performed the autopsy several months after Matthew was injured did not interfere in any way with her assessment as to the cause of death.(Id. 7).

In discussing changes she saw to Matthew's brain, Dr. Tlomak testified,

> "This changes(sic) that I just described were due to hypoxic ischemic brain injury. And what this means there was low oxygen level, and there was not blood flowing to the brain, and that's why I saw those changes in autopsy.
>
> "There were additional changes and those changes were located almost in the center of the brain. It was dilatation of the ventricular system of the brain, and also white matter was significant loss in white matter.
>
> "And the appearance of white matter was different. It was no longer white. It was gray and gliotic. It almost look(sic) like scar tissue.
>
> "And those findings were secondary to traumatic brain injury that is called diffuse axonal brain injury"

(Id. 16).

Dr. Tlomak opined that,

> "The amount of force required to cause this type of injuries is very large. I cannot exactly give you the number, but this type of injuries – this type of injuries can occur during a high speed motor vehicle accidents or falling from high buildings."

(Id.25).

Dr. Tlomak further testified that "[there were multiple studies done that showed falling from at least the third floor...can cause this type of injuries(sic)."(Id. 26). Tlomak asserted that "falling from the short distance of two, three, four feet will not cause a severe brain injury. So it would still be non-accidental injury, blunt force injury."(Id.).

Dr. Tlomak concluded that the cause of death was homicide.(Id. 27).

Dr. Thomas Young's testimony

Mr. Cramer presented the testimony of Dr. Thomas Young, a forensic pathologist, who opined that Matthew's "death is complications of hypoxic ischemic encephalopathy due to an apparent life threatening event. In other words, resuscitated Sudden Death Syndrom. The manner of death is natural." (Young: Id.: 41, 53-54).

Dr. Young explained that if the heart stops and breathing stops from SIDS and if someone gets there early enough and starts CPR they may be able to get the heart going again(Id.57). However, the problem is in resuscitation cases there is usually very severe brain damage and outcomes are not good.(Id:57-58). When the blood flow to the brain stops, brain tissue death occurs.(Id.) When blood flow resumes, as with resuscitation, blood vessels in the brain will leak. (Id. 57-58). This can cause intradural and subdural hemorrhaging.(Id:58). In autopsy may see blood all along neuroaxes of brain and spinal cord.(Id. 59). Subdural hemorrhaging is not always due to trauma.(Id).This process can also the brain to swell.(Id. 60).

Dr. Young reviewed the police reports of Michael Cramer's version of what had occurred and opined that Cramer's account was entirely consistent with Young's opinion that Matthew was a resuscitated SIDs death.(Id. 61).

Young noted that the EMT's did not note any evidence of trauma on Matthew.(Id. 62). Further the emergency room doctor said did not he did not see injuries on child except those resulting from resusitative efforts.(Id. 63).

State's Rebuttal

On rebuttal, the state recalled Dr. Tlomak, who testified that Matthew could not have died as a result of hypoxia-ischemia because in the autopsy she found evidence of trauma i.e.,

> "..in addition to subdural hemorrhage, subarachnoid hemorrhage, arachnoid hemorrhage and changes in the white matter that include loss of white matter.
>
> There is a part of the brain that is called corpus callosum which connects both cerebral hemispheres, and this part was very thin, And also in the center of the brain there are ventricles which are cavernous chambers that are connected, and there were very dilated.

(66: 15-16).

According to Dr. Tlomak, if Matthew had died as a result of hypoxia-ischemia, there would not have been the loss of white matter, dilation of the veins or a thin corpus callosum.(Id: 17).

Dr. Tlomak further testified that she had performed an autopsy on a resuscitated SIDS baby and

that child the brain was "just a little bit swollen, there was no subdural hemorrhage, no subarachnoind hemorrhage and no retinal hemorrhage.(Id. 18).

To support her claim that children who died as a result of hypoxia-ischemia did not exhibit subdural hemorrhages, Dr. Tlomak cited a study performed by Dr. Geddes, in which according to Tlomak, Geddes found only microscopic evidence for subdural hemorrhages in such children; Tlomak said Matthew's bleeding was not microscopic.(Id. 19).

Dr. Tlomak disagreed with Dr. Young that the blood seen on the Matthew's spine was due to gravity, she concluded that it was the result of trauma.(Id. 21-22).

To counter Dr. Young's thesis that Matthew's brain swelled as a result of hypoxia-ischemia due to being resuscitated, Tlomak testified that the CT scan taken approximately 1.5 hours after resuscitation did not reflect significant brain swelling.(Id. 24, 25)

During the entire trial, there was no evidence to inform the jury that if Matthew had been subjected to an inflicted or accidental head trauma, it would be impossible to determine when the injury occurred, because of the possibility of a lucid period between the time of injury and the time of collapse. Neither Doctors Valvano nor Tlomak testified about when the injury must have occurred.

Mr. Cramer filed a postconviction motion alleging that Volvano's and Tlomak's testimony was at best misleading and in several cases demonstrably false; that trial counsel was ineffective and that the trial court should grant a new trial in the interest of justice because the real controversy had not been fully tried.(43)

Dr. John Plunkett's report

Cramer moved for postconviction relief, attaching a report by Dr. John Plunkett, a board certified forensic pathologist licensed in Wisconsin and Minnesota.(Ap. A 108- 123). The postconviction motion and Dr. Plunkett's report outlined several areas where the medical literature directly contradicts the testimony of Doctors Valvano and Tlomak.

Dr. Plunkett also discussed the problem of pinpointing the time frame in which an injury had occurred even if one accepts Drs Valvano and Tlomak's theory that Matthew had incurred a traumatic head injury.(43: 30)(Ap. A 109)

Further, Dr. Plunkett challenged the accuracy of Dr. Valvano's and Dr. Tlomak's testimony.

> a. Dr. Valvano's suggestion that the small subarachnoid hemorrhage was caused by rupturing of the bridging veins was almost certainly incorrect because it is highly unlikely that bridging vein rupture causes small-volume subdural hematoma seen in Matthew.(43:31)(Ap. A 110).
>
> b. Dr. Valvano and Dr. Tlomak's conclusions that the mass of blood located on the cervical spine was caused by trauma is incorrect. The margins of this mass are well defined, indicating that the area of enhancement is within a defined anatomical structure, such as a

venous varix or venous plexus. (The anterior extradural spinal cord has a prominent venous plexus, which when engorged, become easily identifiable on MR scan.) This MR finding is not secondary to trauma, but is most likely a consequence of venous shunting secondary to intracranial pathology, or slow or stagnant venous flow.(43:30)(Ap. A 109).

c. Dr. Valvano's testimony that Matthew's brain injuries were caused by rotational acceleration/deceleration forces to the brain is incorrect. Dr. Valvano was implying that Matthew was shaken. Matthew had no evidence of shaking or impact injury. However, even if impact caused Matthew's head injury the mechanism was deformation, not angular acceleration. There is no experimental evidence that shaking can cause brain damage in an infant, although shaking may cause significant and potentially fatal neck damage. While it is possible at least theoretically to shake an infant violently to cause cervical spinal cord damage, cessation of breathing and death. However, scientific studies indicate that it is not possible to shake an infant hard enough to cause a concussion, SDH, or traumatic brain injury (TBI).

(Neuroscientists often refer to TBI as diffuse axonal injury, or DAI.) Studies published in the peer-reviewed scientific literature have shown that shaking a ten-pound surrogate produces a maximum acceleration approximately ten times the acceleration due to gravity, or 10 *g*'s. The *concussion* threshold for a 3-month-old infant is 50 *g*'s. Shaking achieves maximum brain acceleration well below any established brain injury threshold.

Shaking is unlikely to cause brain damage. However, it could cause other injuries at levels considerably below the brain injury threshold. A person "shaking" a 3-month-old infant such as Matthew would have to exert a large quantifiable force *to the chest or arms* in order to accelerate the head at 10 *g*'s. This force is likely to causes skin bruises or fractures. Matthew had no evidence for arm or chest injuries.

If the head is unrestrained and free to move, and a person or an object applies a force (acceleration; "shake") to the thorax or arms, the head will move. The force is transmitted through the neck to cause the head motion (impulsive loading). The neck fails structurally at acceleration considerably lower

than that required to cause bridging vein rupture or traumatic brain damage. Therefore, if shaking caused mechanical brain injury, then significant structural neck damage must accompany it. Matthew had no evidence for spine or spinal cord injury.(43: 32-33)(Ap. A 111-112).

d. Dr. Valvano's conclusion that Matthew's pattern of retinal hemorrhages can only be due to abusive head trauma or an severe accidental trauma is speculation and is contradicted by research and case-report literature. There are no experimental studies that support this mechanism. In contrast, there are several experimental studies indicating that an increase in intra cranial pressure is the cause for hemorrhage in these situations.(43: 33-34)(Ap. A 112-113).

e. Dr. Valvano's claim that an accidental fall could not have caused Matthew's injury because such falls have "studied extensively in falls occurring in hospitals" - is incorrect. One cannot conclude that fatal injury may not occur in a low-level fall because it did not occur in these studies. However, the published studies indicate that significant

injuries *did* occur in the study population. These injuries include skull fractures and long-bone fractures. (43:34-35)(Ap. A113-114).

f. Dr. Valvano's claim that any accidental injury would be focal and limited to the area of impact and would not give the bilateral subdural hemorrhages or diffuse brain injury that Matthew had, is incorrect. Matthew had no evidence for impact head injury. However, even if one assumes that impact caused his head injury, the impact must cause both focal and diffuse injury because the impact causes the head to rotate with an axis in the neck. The impact-induced rotation will cause diffuse brain injury in addition to focal (contact) injury such as a scalp bruise or a skull fracture. In contrast, non-impact impulsive loading, i.e., "shaking" or whiplash, will only cause diffuse injury and will not cause focal injury.(43:35-36)(Ap. A114-115).

g. Dr. Valvano's claim that Matthew's head injury could have been caused by an impact against a cushion like a mattress or a sofa or a chair cushion without leaving external evidence of injury is wrong. While it is true that impact against a soft surface may not

leave evidence for a bruise, however, the soft surface increases the distance and/or the time over which the head accelerates during impact, decreasing the force by as much as one or two orders of magnitude, resulting in no scalp bruise as well as no brain injury. For example, if a caretaker is carrying a 3-month-old infant and trips and drops the baby, and the infant's head is 4 feet above a hardwood floor when he/she is dropped, the infant's head will strike the floor at 16 feet/seconds. If the duration of the impact (the time it takes to go from 16 feet/second to zero) is 10 msec (typical for an impact against a non-yielding surface), the average acceleration during the impact is 1600 ft/sec^2 (50 *g*) and the peak acceleration is approximately 3200 ft/sec^2 (100 *g*). This acceleration is well above established injury thresholds. In contrast, if the child is dropped onto a bed or couch where the duration of the impact is 100 msec (1/10 second, typical for an impact against a "soft" surface), the average acceleration during the impact will be 5 g and the peak acceleration 10 g, well below any established threshold for brain injury. (43:36)(Ap. A 115).

h. Dr. Valvano's claim that other

than a few defense witnesses there is no controversy about SBS syndrom is wrong as demonstrated by several recent court cases and journal articles.(43:36-38)(Ap. A115-117).

I. Dr. Valvano's dismissal of biomedical modeling as crude implies that modeling has progressed little during the past 40 years. This is incorrect. Biomechanical modeling is sophisticated and is an integral part of our daily lives, as a Google search for "Biomechanical Modeling" will demonstrate. Modeling is the basis for all of the Federal Standards for sports helmets, motor vehicles, playground equipment, playground surfaces, and innumerable other devices and environments we encounter and use each day.(43:38)(Ap. A 117).

j. Dr. Valvano was incorrect when he said "Yeah. I'll tell you what all the experts will tell you. It takes significant and violent force [referring to Matthew's head injury]. But can we put a number to it? No. Because there's probably not just one number." There have been Federal Standards for *infant* head injury thresholds since approximately 1995. Researchers used actual experimental data to establish these thresholds.(43:38-39)(Ap.

A117-118).

k. Dr. Tlomak's claim that the fact that Matthew died several months after his initial collapse did not interfere with her ability to determine the cause and manner of death, was misleading at best. Matthew had no evidence for a scalp bruise, skull fracture, or mechanical brain injury either on admission to the hospital or at the time of the autopsy. Therefore, it is impossible to determine the cause of his death *based on the autopsy findings alone* if he were to die seven months later, or even seven weeks later. The autopsy findings will be identical regardless of whether a mechanical event or natural causes lead to his initial cardiopulmonary arrest. A forensic pathologist must determine Matthew's cause and manner of death by reviewing and interpreting his history, clinical, laboratory, and radiological findings. The autopsy in Matthew's specific circumstance is irrelevant unless it disclosed a previously undiagnosed major disorder, such as a vascular malformation or an undiagnosed genetic disorder, which it did not.(43:39-40)(Ap. A 118-119).

l. Dr. Tlomak's testimony that Matthew's brain gliosis (scarring) was "secondary to traumatic brain injury that is called diffuse axonal

brain injury, ” is incorrect. It is impossible to differentiate traumatic from non-traumatic axonal injury when there is anoxic brain damage. Matthew had no radiographical evidence for traumatic axonal injury. Further, impact does not lead to traumatic axonal injury in a three-month-old infant except in specific circumstances of mechanical loading. These circumstances include complex displaced skull fractures, which Matthew did not have.(43:40)(Ap. A119).

m. Dr.Tlomak’s testimony, “The amount of force required to cause this type of injuries [sic] is very large”, analogizing to a high-speed vehicular accident or falling from high buildings, is incorrect and irresponsible. Even if one assumes that impact caused Matthew’s injury, the force required may be as little as 500 pounds, which is easily achievable with a 3-4 foot gravitational fall. Further, if Matthew had been involved in a high-speed vehicular accident or a fall from a high building, striking his head on the ground, the impact would literally destroy his scalp, skull, and brain.(43:40)(Ap. A119).

n. Dr. Tlomak’s testimony. “There were multiple studies done showing that falling from at least third floor can cause this type of injuries [sic],” is incorrect. There

are *no* studies showing that a fall from a third floor, i.e., approximately twenty feet, with a head impact, will cause Matthew's type of brain trauma absent gross evidence for impact including complex displaced skull fractures and brain lacerations. Matthew had neither. If an infant were to fall 20 feet, striking his head on a non-yielding surface such as hard-packed earth or asphalt, his velocity at impact would be 36 feet/second. The average acceleration during the impact would be approximately 3600 feet/sec ^{2}, and the peak acceleration would be 7200 feet/sec ^{2}. Seventy-two hundred feet/sec ^{2} is 223 *g* (223 times gravitational acceleration). An acceleration of 223 g is almost double the acceleration associated with a 95% probability of skull fracture in an infant, and will cause a complex, comminuted displaced skull fracture.(43:40-41)(Ap. A119-120).

o. That Dr. Tlomak's testimony that the trauma she found (SDH, SAH, arachnoid hemorrhage, loss of white matter, dilation of the veins, and a thin corpus callosum) would not have occurred had there been no [mechanical] trauma, is incorrect. Hypoxic-ischemic injury such as may be found in a sudden unexpected infant death in which the infant has been

resuscitated and lives for several weeks or months may have identical autopsy findings to those of mechanical (impact) trauma.(43: 41)(Ap. A 120).

p. The fact that Dr. Tlomak performed one autopsy on a resuscitated "SIDS" while she was a resident in New Mexico, and found no SDH, SAH, or RH in that child, is irrelevant to the evaluation of Matthew's findings.(43:41)(Ap. A 120).

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q. Dr. Tlomak's testimony that Geddes et al 2003 found only microscopic evidence for SCH. is incorrect. One of the infants in the Geodes study has visually identifiable subdural bleeding. Further, and more significantly, Tlomak neglects to reference more recent research that clearly shows in peer-reviewed publications the association between hypoxic damage and subdural bleeding.(43: 41)(Ap. A 120).

r. Dr. Tlomak's statement that there was no evidence of significant brain swelling in the CT scan performed approximately 1.5 hours after resuscitation, was correct,. However, a CT scan is not an intracranial pressure monitor. Further, it usually although not always takes a minimum of 6-12 hours for a CT scan to identify cerebral edema and hypoxic-ischemic injury, even though there is irrefutable clinical

evidence for their existence. (43 :42)(Ap. A 121).

The circuit court denied Mr. Cramer's motion for a new trial without a hearing and Mr. Cramer now appeals.

ARGUMENT

I. This court should order an evidentiary hearing because Mr. Cramer's postconviction motion alleged sufficient basis to support a claim that the State presented demonstrably false and misleading testimony at trial that violated Mr. Cramer's right to due process.

A. Standard of review for determining whether hearing should be held.

If the motion on its face alleges facts which would entitle the defendant to relief, the circuit court has no discretion and must hold an evidentiary hearing. ***State v. Bentley,*** 201 Wis.2d 303, 310, 548 N.W.2d 50 (1996) Whether a motion alleges facts which, if true, would entitle a defendant to relief is a question of law the appellate court reviews *de novo*. Id.

B. Mr. Cramer alleged sufficient facts to entitled him to a hearing.

It has long been established that a conviction that rests on false or misleading testimony violates due process. *See* ***Giglio v. United States***, 405 U.S. 150 (1972); ***Napue v. Illinois,*** 360 U.S. 264 (1959). It does not matter whether the prosecutor intended or even knew

that the testimony was false: "whether the nondisclosure [of the truth] was a result of negligence or design, it is the responsibility of the prosecutor." ***Giglio***, 405 U.S.at 154.

Due process is also violated if the prosecution introduces *misleading* testimony. In ***Alcorta v. Texas***, 355 U.S. 28 (1957), the Court granted relief because the witness conveyed a false impression, despite the fact that the testimony was not clearly false. *Id*. at 31 (the witness "gave the jury the false impression that his relationship with petitioner's wife was nothing more than that of casual friendship"). *See also* ***United States v. Freeman***, 650 F.3d 673, 680 (7th Cir. 2011) ("To uphold the granting of a new trial, there does not need to be conclusive proof that the testimony was false or that the witness could have been prosecuted for perjury; all that matters is that the district court finds that the government has knowingly used false testimony.") (knowing use of false testimony includes instances in which the government "should have known" that the testimony was false, because the government has a "duty to assure the accuracy of its representations").

> To obtain a new trial, the defendant must establish: (1) that there was false testimony; (2) that the government knew or should have known it was false; and (3) that there is a likelihood that the false testimony affected the judgment of the jury.

United States v Freeman, 650 F.3d at 678. (cite omitted).

1 The state presented false or misleading testimony.

As outlined in Mr. Cramer's postconviction motion, the state in this case relied extensively on demonstrably false and misleading testimony. Mr.

Cramer's postconviction motion.(43:) sets out ten areas where Dr. Valvano's testimony and nine areas where Dr. Tlomak's testimony was simply wrong - not, as the trial court asserted, merely a different opinion. (49: 2). In his report attached to the postconviction motion(43:29-44) (App A108-123), Dr. Plunkett cited, in detail, the medical literature that directly refutes claims that Dr. Valvano and Dr. Tlomak made.(43: 29-44).

Take just a few examples of Dr. Valvano's testimony:

> 1. Matthew's injuries are the result of rotational acceleration/deceleration forces to the brain. *(*64:65). Dr. Valvano explained what he meant by rotational acceleration/decleration forces.
>
> > [W]hen a baby's head is moved through an arc either because someone throws the baby down or throws the baby across the room or bangs the baby's head against something or hit the baby's heard or some combination of those things, the head moves in an arc. ...And all of those force from that movement through the arc and that sudden acceleration and sudden deceleration from those movements while that's happening the brain is moving withing the skull, and that causes damage to the that brain.....

(Id.)

As reflected in his report, had he been allowed to testify, Dr. Plunkett would have explained Dr. Valvano's errors and discuss the medical literature that makes clear that Dr. Valvano's implication that "shaking" (impulsive loading) was the mechanism for Matthew's injury and death is incorrect.(43:32)(A. Ap 111) Matthew had no evidence for either "shaking" or impact head injury. (Id). But, if mechanical trauma (impact) caused Matthew's

head injury, the mechanism was deformation, not angular acceleration.(id). There is no experimental evidence that "shaking" can cause brain damage in an infant, although "shaking" may cause significant and potentially fatal neck damage. (Id).

As pointed out by Goldsmith W, Plunkett J. *A biomechanical analysis of the causes of traumatic brain injury in infants and children*. Am J Forens Med Pathol 2004;25:89-100.

> These structural differences cause the injury mechanism for an infant to be fundamentally different from that of an older child or adult. Impact loading of the compliant infant skull/brain unit produces potentially damaging levels of strain within the entire structure. Deformation, not impact-induced angular acceleration, is the critical factor.

(Goldsmith 2004, page 94).

Dr. Plunkett would have further testified that if the baby's head is unrestrained and free to move, and a person or an object applies a force (acceleration; "shake") to the thorax or arms, the head will move.(43:32)(A.Ap111). The force is transmitted through the neck to cause the head motion (impulsive loading).(Id). The neck fails structurally at acceleration considerably lower than that required to cause bridging vein rupture or traumatic brain damage. Therefore, if shaking caused mechanical brain injury, then significant structural neck damage must accompany it.(Id) Matthew had no evidence for such a spine or spinal cord injury.(Id).

As pointed out by Bandak FA. *Shaken Baby Syndrome: A biomechanics analysis of injury mechanisms.* Forens Sci Int 2005;151:71-79.

> We have determined that an infant head subjected to the levels of rotational velocity and acceleration called for in the SBS literature, would experience forces on the infant neck far exceeding the limits for structural failure of the cervical spine. Furthermore, shaking cervical spine injury can occur at much lower levels of head velocity and acceleration than those reported for the SBS. These findings are consistent with the physical laws of injury biomechanics as well as our collective understanding of the fragile infant cervical spine from (1) clinical obstetric experience, (2) automotive medicine and crash safety experience, and (3) common parental experience. The findings are not, however, consistent with the current clinical SBS experience and are in stark contradiction with the reported rarity of cervical spine injury in children diagnosed with SBS. In light of the implications of these findings on child protection and their social and medico-legal significance, a re-evaluation of the current diagnostic criteria for the SBS and its application is suggested.

(Bandak 2005, page 71).

> 2. Dr. Valvano said that accidental falls cannot cause injury, because they have been "studied extensively in falls occurring in hospitals." (Valvano 64:74-75). Dr. Tlomak said essentially the same thing. (Tlomak 64:26).

Dr. Plunkett would have testified that Drs. Valvano and Tlomak were wrong when they said that accidental falls can not cause injuries.(43: 34)(A. AP 113). One cannot conclude that fatal injury may not occur in a low-level fall because it did not occur in the studies cited by Valvano.(Id.) However, the published studies do indicate that significant injuries did occur in the study population.(Id). These injuries include skull

fractures and long-bone fractures. See Helfer 1977[2], Nimityongskul 1987[3], and Lyons 1993[4]. Further, the peer-reviewed literature, hospital reports, and the lay press unequivocally indicate that accidental falls, including those occurring in a hospital, may cause serious injury or death.(Id).

In his report Dr. Plunkett cites many medical and press articles disputing Dr. Valvano's testimony. For example, Denton S, Mileusnic D. *Delayed sudden death in an infant following an accidental fall.* Am J Forens Med Pathol 2003;4:371-376., discusses the death of a nine month old who experienced a fall and died 72 hours after a symptom-free lucid period.

> Several controversies exist regarding ultimately lethal head injuries in small children. Death from short falls, timing of head injury, lucid intervals, presence of diffuse axonal injury (DAI), and subdural hematoma (SCH.) as marker of DAI are the most recent controversial topics of debate in this evolving field of study. In this area of debate, we present a case of delayed death from a witnessed fall backwards off a bed in a 9-month-old black male child who struck his head on a concrete floor and was independently witnessed as "healthy" postfall for 72 hours until he was discovered dead in bed. Grandmother, babysitter, and mother all independently corroborated under police investigation that the child "acted and behaved normally" after the fall until death. Autopsy showed a linear nondisplaced parietal skull fracture, diastasis of adjacent occipital

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2 Helfer RE, Slovis TL, Black M. *Injuries resulting when small children fall out of bed*. Pediatris 1977;60:533

3 Nimityongskul P, Anderson LD. *The likelihood of injuries when children fall out of bed.* J Pediatr Orthoped 1987;7:184-6.

4 Lyons TJ, Oates RK. *Falling out of bed: a relatively benign occurrence Pediatrics 1993;92:125–7.*

> suture, subgaleal hemorrhage with evidence of aging, small posterior clotting SCH., marked cerebral edema, and a small tear of the midsuperior body of the corpus callosum consistent with focal axonal injury (FAI). No DAI was seen, and there were no retinal hemorrhages. All other causes of death were excluded upon thorough police and medical examiner investigation. Although this seems to be a rare phenomenon, a delayed, seemingly symptom-free interval can occur between a clinically apparent mild head injury and accidental death in a young child.

(Denton 2003, page 371)

> 3. Dr. Valvano said that impact against, for example, a cushion like a mattress or a sofa or a chair cushion won't leave any external evidence for injury. (Valvano Tr 6:89)\

Citing basic laws of physics, Dr. Plunkett would have testified that while it is true that impact against a soft surface may not leave evidence for a bruise, nevertheless "the soft surface increases the distance and/or the time over which the head accelerates during impact, decreasing the force by as much as one or two orders of magnitude, resulting in no scalp bruise as well as no brain injury.(43:35)(A Ap. 115). For example, if a caretaker is carrying a 3-month-old infant and trips and drops the baby, and the infant's head is 4 feet above a hardwood floor when he/she is dropped, the infant's head will strike the floor at 16 feet/seconds.(Id) If the duration of the impact (the time it takes to go from 16 feet/second to zero) is 10 msec (typical for an impact against a non-yielding surface), the average acceleration during the impact is 1600 ft/sec^2 (50 g) and the peak acceleration is approximately 3200 ft/sec^2 (100 g). This acceleration is well above established injury thresholds. In contrast, if the child is dropped onto a bed or couch where the duration of the impact is 100 msec (1/10 second, typical for an impact against a "soft" surface),

the average. acceleration during the impact will be 5 g and the peak acceleration 10 g, well below any established threshold for brain injury.**"** (citing Newton I. *Principia Mathematica* 1687). (Id).

4. Dr. Valvano denied that there was any real dispute that shaking a baby could cause abusive head trauma.(64: 91).

As pointed out below, both case law and numerous articles belie this assertion.

The inaccuracies discussed above are only a small portion of the inaccuracies presented by the state at Mr. Cramer's trial. Mr. Cramer's motion and exhibits outlined many more with cites to medical literature which show how and why they are incorrect.

2. The government knew or should have known it was false

At a very minimum State knew or should have known that Dr. Valvano's testimony on cross examination that there was no real dispute that shaking a baby could cause abusive head trauma is clearly false. Dr. Valvano testified,

> There is no controversy outside of the courtroom. The American Academy of pediatrics, pediatricians, neurosurgeons, it's well accepted that violently shaking a baby causes injury to that baby. And outside of a few limited numbers of physicians, most of whom appear as defense witnesses, there is really no controversy.

(64: 91).

The extent of the dispute had, by the time of trial, been widely reported in both medical and legal literature[5]

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[5] See articles cited in Dr. Plunketts Report. Further, what follows below is just a sampling of the data and arguments set forth by Professor Deborah Tuerkheimer, De Paul University College of Law in a comprehensive medical/legal study of Shaken Baby Syndrome and the criminal courts. *The Next Innocence Project: Shaken Baby Syndrome and The Criminal Courts*, 87 Washington University Law Review 1 (2009). Science has evolved in leaps and bounds. The science of SBS can no longer support a finding of proof beyond a reasonable doubt in "triad" only cases which represent a significant number of SBS prosecutions. Put simply, as the Goudge Inquiry in Canada, said "change has raised the real possibility of past error." STEPHEN T. GOUDGE, INQUIRY INTO PEDIATRIC FORENSIC PATHOLOGY IN ONTARIO 531 (Ontario Ministry of the Att'y Gen.2008). Research has undermined the scientific basis for defining the triad of Shaken Baby Syndrome symptoms as exclusively diagnostic of abuse. *See, e.g.*, J. Plunkett and J.F. Geddes, Letter, *The Evidence Base for Shaken Baby Syndrome*, 328 BRIT. MED. J. 719, 720 (2004) (urging"reconsider[ation of] the diagnostic criteria, if not the existence, of Shaken Baby Syndrome"). Physicians in radically increasing numbers are no longer willing to testify with certainty that the constellation of symptoms that once characterized SBS individually and collectively must in every case indicate that an infant was abused. *See* Clinical Statement of American Academy of Opthamology, http://one.aao.org/CE/PracticeGuidelines/ClinicalStatements_Content.aspx?cid=c379ec3e-8251-48e6-a88efb6f37954b14; *See*, e.g., *John Caffey, On the Theory and Practice of Shaking Infants*, 124 AM. J. DISEASES CHILDREN 161 (1972); Robert Reece, *What Are We Trying to Measure: The Problems of Case Ascertainment*, 34 AM. J. PREVENTATIVE MED. S116 (2008);Brian Harding, R. Anthony Risdon and Henry F. Krous, Letter, *Shaken Baby Syndrome*, 328 BRIT. MED. J. 720, 720 (2004). Specifically, as scientific research has produced new and much more valid explanations for the presence of subdural hematomas and retinal hemorrhages, doctors have become increasingly resistant to using the word pathognomonic when discussing these symptoms. *See, e.g.,* Martha C. Cohen & Irene Scheimberg, *Evidence of Occurrence of Intradural and Subdural Hemorrhage in the Perinatal and Neonatal Period in the Context of Hypoxic Ischemic Encephalopathy*, 12 PEDIATRIC DEVELOPMENTAL PATHOLOGY 169 (2009); Eva Lai Wah Fung et al., *Unexplained Subdural Hematoma in Young Children: Is it Always Child Abuse?*, 44 PEDIATRICS INT'L 37 (2002); V.J. Rooks et al., *Prevalence and Evolution of Intracranial Hemorrhage in Asymptomatic Term Infants*, 29 AM. J. NEURORADIOLOGY 1082 (2008); *See, e.g.*, P.E. Lantz et al., *Perimacular Retinal Folds from Childhood Head Trauma,* 328 BRIT.

and had been recognized by the Wisconsin Court of Appeals. In ***State v. Edmunds*** 2008 WI App 33, ¶ 15, 308 Wis.2d 374, 746 N.W.2d 59, the court of appeals noted the ongoing significant debate in the medical community regarding the legitimacy of the shaken baby impact diagnosis and the fact that other causes can produce conditions that mimic the syndrom.

> Edmunds presented evidence that was not discovered until after her conviction, in the form of expert medical testimony, that a significant and legitimate debate in the medical community has developed in the past ten years over whether infants can be fatally injured through shaking alone, whether an infant may suffer head trauma and yet experience a significant lucid interval prior to death, and whether other causes may mimic the symptoms traditionally viewed as indicating shaken baby or shaken impact syndrome.

Edmunds, 2008 WI App 33, ¶ 15

Further, given ***Edmunds***, the State should have been alerted to the fact that there is major controversy in the medical world about the validity of shaken baby impact syndrom and should have researched the medical and legal literature to determine whether Dr. Valvano's and Dr. Tlomak's opinions were supported.

The central issue then becomes whether the government knew or **should have known** that Drs.

MED. J. 754 (2004); Gregg T. Leuder et al., *Perimacular Retinal Folds Simulating Nonaccidental Injury in an Infant*, 124 ARCHIVES OPTHAMOLOGY 1782 (2006); Patrick D. Barnes, *Imaging of the Central Nervous System in Suspected or Alleged Nonaccidental Injury, Including the Mimics*, 18 TOPICS MAGNETIC RESONANCE IMAGING 53, 55 (2007).

Valvano and Tlomak's testimony was inaccurate. ***US v Freeman***, 650 F.3d at 680.

> The government's duty to assure the accuracy of its representations has been well stated, many times before. ***Berger v. United States,*** 295 U.S. 78, 88, 55 S.Ct. 629, 79 L.Ed. 1314 (1935); ***Alcorta v. Texas***, 355 U.S. 28, 31, 78 S.Ct. 103, 2 L.Ed.2d 9 (1957); United ***States ex rel. Wilson v. Warden Cannon***, 538 F.2d 1272, 1277 (7th Cir.1976); see also ***United States v. LaPage***, 231 F.3d 488, 492 (9th Cir.2000) ("A prosecutor has a special duty commensurate with a prosecutor's unique power, to assure that defendants receive fair trials."). This means that when the government learns that part of its case may be inaccurate, it must investigate. ***United States v.*** **Price**, 566 F.3d 900, 910 n. 11 (9th Cir.2009) (noting "[w]hen a prosecutor suspects perjury, the prosecutor must at least investigate further" (quotation omitted))...

US v Freeman, 650 F.3d at 680.

3. There is a likelihood that the false testimony affected the judgment of the jury.

There can be no doubt that the testimony of Drs. Valvano and Tlomak affected the judgment of the jury. Their testimony was the centerpiece of the state's case. Without it, there would be nothing to suggest that Matthew had died as a result of inflicted injury.

At a minimum, Dr. Valvano's testimony that only doctors who testify as defense witnesses dispute the validity of shaken baby syndrom, undermined the testimony of the defense expert, Dr. Young.

But, the other inaccuracies outlined in Mr. Cramer's postconviction, undoubtedly affected the jury.

For example, Dr. Valvano's claim that Matthew's injuries were the result of rotational acceleration/deceleration forces and his explanation of what those forces could have been clearly would have given the jury a picture-although inaccurate- of how the "crime" had been committed. His testimony that the injuries could have been caused by hitting a cushion, gave the jury an explanation, also although inaccurate, as to why Matthew had no external signs of impact. Without the disputed testimony, the jury would have been left with evidence only of a an sudden, unexpected infant death, - a death which might well be due to natural causes from an undetermined mechanism.

II. This court should order a *Machner* hearing because there was sufficient showing that trial counsel was ineffective.

A. Standard of review where trial court has denied a Machner hearing.

A circuit court acts within its discretion in denying a postconviction motion based on ineffective assistance of counsel without a ***Machner*** hearing when: (1) the defendant has failed to allege sufficient facts in the motion to raise a question of fact; (2) the defendant has presented only conclusory allegations; or (3) the record conclusively demonstrates that the defendant is not entitled to relief. ***Nelson v. State***, 54 Wis. 2d 489, 497-98, 195 N.W.2d 629 (1972). The trial court must form its independent judgement after a review of the record and pleading and support its decision by written opinion; the Court of Appeals will uphold the trial court's decision unless it is an erroneous exercise of discretion. ***State v. Allen***, 2004 WI 106, ¶ 9, 682 N.W. 2d 405.

B. Mr. Cramer has alleged sufficient facts that entitled him to a Machner hearing.

Both the United States Constitution and the Wisconsin Constitution guarantee effective assistance of counsel. ***State v. Simpson,***185 Wis. 2d 772, 519 N.W.2d 662(Ct.App. 1994). ***Strickland v. Washington,***466 U.S. 668, 687 (1984), sets out a two part analysis for determining whether a defendant has been denied effective assistance of counsel under the United States Constitution. First, the defendant must show deficient performance by the defense attorney, that is, performance that falls below an objective standard of reasonableness. Second, the defendant must show prejudice, that is, a reasonable probability that the result would have been different but for the counsel's deficient performance. A reasonable probability is a probability sufficient to undermine confidence in the outcome. However, the defendant need not show that it is more likely than not that counsel's errors caused the result. See also: ***State v. Pitsch***, 124 Wis. 2d 628, 369 N.W.2d 711 (1985).

1. Trial counsel's performance was defective.

Trial counsel's performance was defective in two ways. First, he did not present evidence to show that one can not determine when Matthew was injured, if indeed he was, because of the possibility of a lucid interval between the time of injury and his collapse. Second, he did not correct the inaccuracies outlined in Mr. Cramer's postconviction motion regarding Dr. Valvano and Dr. Tlomak's testimony either by cross examination or by testimony from Dr. Young.

a. Failure to raise the possibility of a lucid interval.

Trial Counsel presented no evidence to inform the jury that even if the jury accepted state's theory that Matthew had been subjected to a head trauma, that did not necessarily imply that Michael Cramer was the culprit because he was the last adult with Matthew before his collapse. Counsel should have presented evidence that there was a possibility of a lucid period between the time of injury and the time of collapse so it would be impossible to determine when the injury occurred Dr. John Plunkett would testify that even if one assumes that Matthew incurred an inflicted or accidental head trauma, it is not possible to determine when the injury occurred.(43: 30)(A Ap 109). Medical literature reports lucid intervals up to three days following head injury. According to the literature, the "a delayed, seemingly symptom-free interval can occur between a clinically apparent mild injury and accidental death in a young child." See Denton S, Mileusnic D. *Delayed sudden death in an infant following an accidental fall*. Am J Forens Med Pathol 2003;4:371-376. page 371).

Counsel should have been aware of the possibility of a lucid interval. ***State v. Edmunds*** 2008 WI App 33, ¶ 15, 308 Wis.2d 374, recognized that there is "a significant and legitimate debate in the medical community ...whether an infant may suffer head trauma and yet experience a significant lucid interval prior to death." Nevertheless, counsel did not introduce this possibility to the jury.

b. Failure to rebut the scientifically flawed testimony of Drs. Valvano and Tlomak.

Counsel did not on cross examine or in his direct case , offer evidence to alert the jury to the many scientific flaws in Dr. Valvano and Dr Tlomak's testimony.

Indeed some of the inaccuracies were stated and not challenged during cross examination. For example, as pointed out above, Dr. Valvano said on cross examination that only doctors who act as defense witnesses dispute the validity of shaken syndrom. That statement went unchallenged. The jury was not told about the numerous peer reviewed articles that do, in fact, challenge that theory.

Dr. Valvano testified again on cross examination that Matthew could have been injured by someone hitting his head on a sofa or bed if done with force and violence but Valvano could not give a specific number as to force necessary .(Valvano 64:88-89). Counsel did not challenge Dr. Valvano on the fact that his testimony defied the laws of physics.

Further, when Counsel tried to challenge the accuracy of Valvano's testimony, by pointing out that there has been biomedical research on the amount of force required to cause brain injury, Valvano undercut this line of questioning

> There has been biomechanical modeling. It's very crude. It's very, very hard to recreate the complexities of the human brain and human neck in a doll model. So, for example, one of the first studies ever done was a plastic

> doll head stuffed with wet cotton attached to a metal hinge. That hardly replicates a human baby. So, yes, there is biomechanical modeling that have tried to estimate forces. And that work is ongoing, and what we find is as those models become more sophisticated the amount of force that we are seeing that is required to cause these injuries is actually less.

(Valvano 64:92),

However, Counsel did not educate the jury that, indeed, biomedical modeling, which has been used to show the invalidity of shaken baby syndrom, is very sophisticated and forms the basis for all of the Federal Standards for sports helmets, motor vehicles, playground equipment, playground surfaces, and innumerable other devices and environments we encounter and use each day.

Again, the foregoing are just examples of where Counsel failed to challenge the testimony of both Dr. Valvano and Tlomak either in cross examination or by having his expert specifically dispute the inaccurate testimony and give examples of research that rebuts their scientifically flawed claims.

To be clear, Mr. Cramer is not saying, Trial Counsel got the wrong expert. Mr. Cramer is saying that Counsel failed through cross examination and/or through examination of his own expert to inform the jury that there is a large body of medical research the directly refutes the testimony of both Dr. Valvano and Dr. Tlomak.

2. Mr. Cramer was prejudiced.

The evidence against Mr. Cramer was not overwhelming. Indeed, other than the testimony of Drs. Valvano and Tlomak was no evidence that anyone had inflicted brain injuries on Matthew. Had the testimony been properly challenged to inform the jury that many of Valvano's and Tlomak's statements conflict with the medical literature, the jury would have had more basis to doubt Michael Cramer's guilt.

In addition, had the jury heard that even if Matthew had received traumatic brain injury, he might have experienced a symptom-free lucid interval of up to 72 hours, the jury would have had no basis to find that Michael Cramer had caused the injuries simply because he was present when Matthew collapsed.

Further, had Dr. Valvano's speculation that Matthew's brain injury might have been caused by hitting Matthew's head on a cushion been properly challenged, the jury would have been informed that Matthew could not have been subjected to an impact sufficient to cause brain injury without have any external signs of injury whatsoever.

III. This court should grant a new trial in the interest of justice.

Circuit courts have the discretion to set aside a verdict and order a new trial in cases where the real controversy was not fully tried, regardless of the type of error involved. See ***State v. Harp***, 161 Wis. 2d 773, 775, 469 N.W.2d 210 (Ct. App. 1991); see also ***State v. Henley***, 2010 WI 97, ¶65 ,328 Wis. 2d 544,787 N.W.2d

350, (criminal defendants may request a new trial in the interest of justice as part of their postconviction motions and appeal). The court need not find a substantial likelihood of a different result on retrial. ***Harp***, 161 Wis. 2d at 775. A new trial may be justified where competent and persuasive evidence was not introduced. See id. at 778 (citing ***Lien v. Pitts***, 46 Wis. 2d 35, 44, 174 N.W.2d 462 (1970)). For example, in ***State v. Hicks***, 202 Wis. 2d 150, 152-53, 549 N.W.2d 435 (1996), our supreme court concluded Hicks was entitled to a new trial because the jury did not hear DNA evidence relevant to the critical identification issue in the case and the state "assertively and repetitively" used the hair sample from which the DNA evidence was derived as proof of Hicks' guilt.

Here, the jury did not hear testimony on at least two topics relevant to the medical diagnosis of shaken baby impact syndrome. First, the testimony did not advise the jury where Drs. Valvano and Tlomak's testimony about the cause and manner of death conflicted with the current medical literature. Second, the jury was not adequately advised about the possibility of a lucid interval between the trauma and the Matthew's collapse . The State's assumption at trial was that because Constance Cramer testified that Matthew seemed fine the morning he collapsed, that establishes that whatever occurred must have happened on Michael Cramer's watch. Unbeknownst to the jury, that assumption is not true; the medical literature makes clear - a young child can be asymptomatic for up to 72 hours after injury before collapsing.

Dr Plunkett's testimony would not be a rehash of Dr Young 's testimony because his testimony would set forth the information that was not given to the jury: (1)

that many of the statements that Dr. Valvano and Dr. Tlomak made that gave the impression that Matthew had received an abusive head trauma were in direct conflict with current medical literature; (2) that much of Dr. Tlomak's testimony that results of her autopsy and investigation were consistent with abusive head trauma and not consistent with resuscitated SIDS (Sudden Infant Death Syndrom) were also in direct conflict with current medical literature; and (3) that even if one assumes Matthew was the victim of head trauma there could have been a symptom-free lucid period of up to 72 hours between the trauma and collapse.

CONCLUSION

For the reasons stated above, Michael L. Cramer, asks this court to reverse his conviction and order a new trial or in the alternative to remand to the trial court for a hearing on Mr. Cramer's postconviction motion..

Dated: March 25, 2013

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CERTIFICATIONS

I certify that this brief meets the form and length requirements of Rule 809.19(8)(b) and (c) in that it is proportional serif font, minimum printing resolution of 200 dots per inch, 13 point body text,11 point for quotes and footnotes, leading of minimum 2 points, maximum of 60 characters per full line of body text. The length of the brief is 10677 words.

_____
Patricia A.FitzGerald

I hereby certify that with this brief, either as a separate document or as a part of this brief, is an appendix that complies with § 809.19 (2)(a) and that contains at a minimum : (1) a table of contents; (2) the findings or opinion of the trial court; and (3) portions of the record essential to an understanding of the issues raised, including oral or written rulings or decisions showing the trial court's reasoning regarding those issues.

I further certify that if this appeal is taken from a circuit court order or judgment entered in a judicial review of an administrative decision, the appendix contains the findings of fact and conclusions of law, if any, an final decision of the administrative agency.

I further certify that if the record is required by law to be confidential, the portions of the record included in the appendix are reproduced using first names and last initials instead of full names of persons, specifically including juveniles and parents of juveniles, with a notation that the portions of the record have been

so reproduced to preserve confidentiality and with appropriate references to the record.

_____
Patricia A. FitzGerald

I hereby certify that I have submitted an electronic copy of this brief, excluding the appendix, if any, which complies with the requirements of Wis. Stats. § 809.19(12). I further certify that this electronic brief is identical in content and format to the printed form of the brief filed as of this date .A copy of the certificate has been served with the paper copies of this brief filed with the court and served on all opposing parties.

_____
Patricia A. FitzGerald