

I, GREGORY D. REIBER, M.D. declare:

1. I am not a party in this action. I am competent to testify as a witness as set forth herein.

2. I am a physician licensed to practice medicine in California. I have obtained the following certificates and licenses. Diplomate, National Board of Medical Examiners - July 1, 1982; California Physician's and Surgeon's License - July 1982; American Board of Pathology - Anatomic/Clinical Pathology - Nov. 1985; American Board of Pathology - Forensic Pathology - May 1987; American Board of Forensic Examiners - July 13, 1994; American Board of Forensic Medicine - January 1, 1996.

3. I am currently a full time Associate Clinical Professor of Pathology at University of California, Davis Medical School and the Director of Autopsy Services.

4. I serve or have served on the following death and trauma committees. San Bernardino County Child Death Review Team, 1988 -1990; Sacramento County Child Death Review Team, member, June 1990 to present; co-chair, spring 1995 to present; Sacramento County Fetal and Infant Mortality Review Team, March 1993 to present; Sacramento County Trauma Review Committee, January 1991 to present; Sierra - Sacramento Valley EMS Agency Regional Trauma Quality Improvement Committee, October 1993 to present; California SIDS Protocol Committee - consultant, April - June 1991.

5. In addition, some of the lectures and seminars that I have presented relating to forensic pathology, head trauma or abuse deaths are:

Loma Linda University Medical Center Clinical Forensic Pediatrics Conference "The Single Fatal Episode - Accident or Abuse?" April 1989; California Attorney General's Office - "Child Death Review Training" - panel discussant - April 28, 1992; Sacramento Regional Homicide Investigators - "Head Trauma in Homicide" - August 1992; San Joaquin Valley Child Death Review Coalition - "Fatal Head Injuries in Childhood" - September 1992; University of California, Davis - Second Annual Pathology Forum - "Forensic Aspects of Childhood Head Trauma" - March 1993; UC Davis Medical Center - Trauma is Teamwork Symposium - "What's the Real Story? The Challenge of Trauma in Forensic Medicine"- October 22, 1993; Orange County Sheriff - Coroner's Death Investigation Course - "Pediatric Forensic Pathology" - May 1993, April 1994; Orange County Sheriff-Coroner's Death Investigation Course - "Forensic Neuropathology"- April 1994; California Blood Bank Society Annual Meeting - The Laboratory in Forensic Sciences - May 1995; Fifteenth Annual Child Abuse and Neglect Conference, UC Davis - Forensic Aspects of Physical Abuse - May 1996; Investigation of Shaken Baby Syndrome. Child Death Review Team Training, sponsored by the California Attorney General's Office, Crime and Violence Prevention Center. March 12, March 26 and July 18, 1997; Identifying Child Abuse - The Ophthalmologist's Role. Instruction course presented at the annual meeting of the American Academy of Ophthalmology, San Francis co, October 28, 1997; New Orleans, November 10, 1998; Investigation & Prosecution of Elder Abuse Homicides for the California District Attorneys Association Elder Abuse Seminar; Napa, December 11, 1998; U C Davis Pathology Grand Rounds - Pediatric Forensic Pathology - A Potpourri of Recent Cases - December 5, 2001.

6. From July 1, 1985 to December 31, 2001, I have performed approximately 5000 autopsies for Coroner's Offices in San Bernardino, Sacramento, El Dorado, Glenn, Yuba, Amador, Placer, Nevada and Marin Counties. In my career, I have personally supervised approximately 750 autopsies. I have testified over 300 times in court cases, predominately as a prosecution witness.

7. I was asked to review the death of Phillip Buell, age 33 mos. from an allegedly intentional blunt force trauma/fatal fall that resulted in the second-degree murder conviction of Ken Marsh in November 1983. I do not know the petitioner, petitioner's counsel or anyone in the Buell family. I have received no compensation whatsoever to review the records and have done so on a pro bono basis.

8. I have reviewed the autopsy photographs, the coroner's investigative report, the autopsy report, Alvarado, Sharp/Children's Hospital patient records, police reports, the Medevac incident forms, and the preliminary and trial testimony of all doctors who offered opinion testimony in the petitioner's case. I have also reviewed Phillip Buell's Kaiser medical records and x-rays. In addition, I have reviewed the microscopic findings of Dr. Benjamin Landing, the Declarations of Floyd Gillis, M.D., Benjamin Landing, M.D., Kenneth Ott, M.D., Roger Williams, M.D., Barbara Wolf, M.D., Paul Wolf, M.D., Khalil Jiraki, M.D., Michael Innis, M.P., Thomas Schweller, M.D., the Curriculum Vitae of Roger Williams, M.D., Barbara Wolf, M.D., the Duke University pathology report of 2/16/94, an 8/96 EB Virus serology test result; and photographs of a broken ashtray and living room at the scene.

9. Upon reviewing the above records, I conclude that Phillip Buell fell and sustained an ultimately fatal head injury. Phillip was not a battered child. My finding of accidental death is based on the following:

10. Kaiser Medical Records. Phillip Buell was not a normal, healthy child. His medical records indicate several problems with ecchymosis (a hemorrhagic, non elevated, irregularly formed discolored area of the skin cause by the seepage of blood beneath the epidermis) and petechial hemorrhages (tiny spots of bleeding under the skin) which are forensic symptoms of disease and coagulopathy (bleeding disorder). In Mid-November 1982, a cephalhematoma (collection of blood on the scalp) was documented. (2399)(2449). In December 1982, the child complained of abdominal pain vomited & seemed to bruise easily. (2455) (2400).

11. On January 5, 1983, Phillip was hospitalized when his stomach hurt and he started turning blue. (2405) He was "pale" and found to have a "large hematoma (a swelling of blood which occurs in an organ or tissue resulting from ruptured blood vessels) over the left parietal area." (2406)(2451) Areas of ecchymosis was found on his lower back on his spine, back of neck, abdomen area, hips and knee. Small areas of petechiae were found on his abdomen. (2654)(2565)(2406). During this hospitalization, his initial hemoglobin was 9.7. (2451)(2500). His platelet count was elevated at 794,000 (2490). His white blood cell count was elevated at 38,000 (2404). He had a positive Infectious Mononucleosis test. (2498) 4 Units of blood was typed and crossed for transfusion. (2404)(2493)(2569) Following blood transfusion, Phillip's hemoglobin improved. (2451). A second test for Infectious Mononucleosis done after blood transfusion was reported negative. (2488). A spleen scan showed a

possible subcapsular hematoma (a swelling of blood which occurs in an organ or tissue resulting from ruptured blood vessels), increased bone marrow uptake and that chronic anemia should be considered. (2517). A final diagnosis summary states "probable ruptured spleen" (2451) but no final diagnosis was made to rule out any disease.

12. A suspected child abuse report was filed. (2409) Phillip had been cared for by his maternal aunt all day long. (2455) The report of child abuse was unsubstantiated after full investigation. (2433)

13. Following his ten-day hospitalization, a Kaiser hematology consult referral was made when Phillip developed fresh bruises (2513). Phillip was characterized as a "2-1/2 year old white male with documented easy bruisability. Also had a splenic rupture without apparent severe trauma." (2514)

14. Around 2/10/83, frequent unexplained vomiting was reported (2415). Phillip also had an incident of spontaneous nosebleed and gum bleeding documenting purpura (spots caused by small hemorrhages that invade the tissues) (2417). A follow-up spleen study was performed on 2/10/83 that reported, "This is top limits of normal in size with somewhat increased tracer uptake (2418). It also states, this appearance and change raises the distinct possibility of a superior and laterally placed hematoma either intrinsic or extrinsic to the spleen." Phillip also had another Infectious Mononucleosis test positive (2416) (2414). A plan was made to repeat the EB Virus titer (2416). On 2/23/83, Phillip's pediatrician, Dr. Stern documented that Phillip was vomiting every few days and another EB Virus study was pending. (2433) I did not find any results for this EB Virus test in Phillip's Kaiser medical records that I reviewed.

15. On 3/4/83, Phillip again tested positive for a Infectious Mononucleosis (2435) taken the previous day. (2436). He continued to vomit and reported abdomen pain for the past 2 weeks. (2436). On 3/25/83 Phillip's medical record notes that his skin was "pale." Phillip's mother reported he fell 2 days before and had bruised his right side. Phillip's abdomen was hard. He had new ecchymosis after minor trauma. He was diagnosed with the "Flu" and sent home. (2437). On 3/31/83, Phillip complained of "abdominal pain" but an x-ray of his swollen left hand was taken. (2438) (2439). The gastroenterologist reported "the examination today is remarkable for petachiae over the abdomen and upper chest..." A bruise was recorded (3 x 6) over Phillip's right hip. (2439)

16. It is significant that petechial hemorrhages were among the findings at this time; given Phillip's previous history, such findings are more likely an indication of a blood vessel or platelet problem than of direct trauma. As a forensic pathologist, many of the findings seen in Phillip's short life suggest a bleeding disorder that was never fully characterized because his coagulation testing never included tests of platelet function.

17. April 27, 1983. Phillip was admitted to Children's Hospital after having fallen from a couch, striking his head on an ashtray on a fireplace hearth.

18. He apparently had a posttraumatic seizure (1773)(1737)(1827)(2231)(2236) and was initially found with a pulse but without spontaneous respirations. Paramedics responded within about 5 minutes of the call. Phillip was ventilated and transported to Alvarado

Hospital where he regained spontaneous respirations with ventilated assistance. (1741) (P.R.T. 70, 84.) No retinal hemorrhages, papilledema, skull fractures or battle signs were observed. (1737). He was given Decadron and his blood pressure and pulse appeared to be stabilized.

19. The Children's Hospital transport unit arrived at Alvarado Hospital at 12:00 p.m. (1828). Dr. David Johnston, a Children's Hospital resident physician, examined Phillip who had a heart rate of 80 and a blood pressure of 100. (2231) (2225) (2231) At 12:20 p.m., Dr. Johnston transfused the child with 8 gm of Mannitol by intravenous push (this means as rapidly as possible) in his jugular vein (1737) (2225) (2231). At 12:30 p.m., 1 unit of blood was hung and the transport team left for Children's Hospital. (2225) Phillip's blood pressure dropped to 80 over the next 20 minutes and his IV in his neck became infiltrated (2225) (2231), indicating that some of the fluid being infused escaped from the vein and diffused into the surrounding soft tissues. At 1:00 p.m., Phillip's pulse dropped to 46 and he suffered bradycardia (a slow heart rate and reflects a slow pulse). The doctors gave him Dopamine, Epinephrine and Atropine (2225) (2237).

20. A CT scan of Phillip's head showed a subdural hematoma involving the left frontal, temporal and parietal areas and a 9 mm left to right midline shift of the brain.

21. There is no convincing evidence that Phillip had a non-depressed left parietal skull fracture. All of the contemporaneous reports (viewing the CT scan exclude any mention of any fracture (2237) (2234)(2239)(2240)(2251)(2443) and Dr. Chadwick wrote in Child Protection Team consult that brain death at this point is "unusual in the absence of skull fracture." (2236) Dr. Chadwick testified that he later discussed the skull fracture with the radiologist but no one told Dr. Williams about it. (P.R.T. 178.) In my forensic experience, a CT scan is often unreliable in making a diagnosis of skull fracture. The best method to determine a skull fracture is by finding it during autopsy. No fracture was found at autopsy (2351). Dr. Williams cites that he removed any tissue covering the skull bone that might have obscured the appearance of a fracture (P.R.T. 98); this makes it even less likely that a fracture was missed by autopsy, in spite of the belated CT interpretation.

22. Externally, "lacerations" were noted on the left side of Phillip's neck. Initial examinations did not note retinal hemorrhages, but later examinations at Children's Hospital showed in some instances left sided retinal hemorrhages, and in others, bilateral hemorrhages. A bruise on the back of the right shoulder was thought to be a human bite mark inflicted one to two weeks earlier by another child (R.T. 482).

23. Phillip's Autopsy. An autopsy was performed on 4/29/83 by Dr. Roger Williams, "Pathologist for the Coroner." It should be noted that Dr. Williams is a pediatric pathologist but has no fellowship training in or board certification in forensic pathology (233-234), despite characterizing himself in testimony as a forensic pathologist (P.R.T. 107).

24. Dr. Williams' written autopsy findings report swelling and purple discoloration of the left upper eyelid; a large "bruise" of the left forehead, temporal area and cheek, a small bruise anterior to the left

ear, abrasion behind the left ear, a small bruise of the left chin, and "three lacerations and a scratch" on the left posterior neck. The largest "laceration" was 2.6 cm (just over 1 inch) long and 2.2 cm deep. Two other lacerations were 0.9 cm and 0.8 cm long. The left shoulder showed bruising and abrasion, which was also measured and described. All of these injuries are well illustrated in autopsy photographs. No other external injury is mentioned.

On internal examination, no unusual features of the peritoneal (abdominal) surfaces were noted. No evidence of splenic injury, old or recent, was seen. The head showed massive subcutaneous and subgaleal hemorrhage generally, sparing the right temporal region. No skull fractures were present. No epidural hemorrhage was seen. A large left convexity subdural hemorrhage was seen. No significant subarachnoid hemorrhage was seen. The brain was markedly swollen. No cortical contusions or internal cerebral hemorrhages are mentioned. An area of hemorrhage was noted in the mesencephalon and dorsal pons. The cerebellum, medulla and upper cervical spinal cord were unremarkable.

25. My own review of the clinical (during hospitalization) and autopsy photographs of Phillip Buell indicate the following:

The swelling and "bruising" on the left side of Phillip's face found at autopsy were not present in several clinical photographs, and represent secondary effects of the pressure monitor placement. In other words, these are complications of therapy, not injuries from the initial incident. The injuries to the back of the neck, on the left side, are not "lacerations" but are in fact incised wounds or "cuts." Lacerations are blunt injuries, while the injuries to Phillip's neck are sharp force wounds. These could readily have been caused by large shards of broken glass. The lack of bloodstains on the glass ashtray does not rule it out as the inflicting object, as bleeding does not occur instantaneously. If the contact between the tissue of Phillip's neck and the glass were brief enough, no blood would be deposited. Two of the wounds are superficial, and would not be expected to produce any significant external bleeding. The lack of blood at the scene is also consistent with immediately compressing the wound with a towel. The appearance of blood on the towel, but not elsewhere at the scene, is evidence that the injuries received prompt attention from the child's caretaker, Mr. Marsh. The fact that, initially, Phillip had no spontaneous respirations (1737) but was later found to have some spontaneous breathing effort (1741) also indicates that there was no significant delay in seeking of medical care in this case; a delay of one to several hours between injury and 911, as suggested by Dr. Chadwick's testimony (P.R.T.158-59), would make it unlikely that the child would regain spontaneous breathing activity, given the increase in brain swelling that would occur over this lapse of time. The injuries at the left rear of Phillip's neck, as depicted in several clinical photographs, show active oozing of blood at the hospital. This would be unlikely to continue to such a degree after several hours' delay in seeking treatment. Additionally, retinal hemorrhages were not present when the child was first seen at Alvarado Hospital (1737) but were noted several hours later at Children's Hospital (2232). The fact that the hemorrhages were not present when Phillip was first seen further renders Chadwick's theory of a delay between injury and emergency medical response untenable. That there is evidence of prompt attention to the injured child is singularly unusual for a case of intentionally inflicted injury, but is typical for a setting

of accidental injury.

26. A linear abrasion, or scrape, is present on the upper back of the neck leading up toward the base of the skull, and a more ovoid abrasion (not a "Battle's sign") is present behind the left ear. A small oval scrape is present behind the right ear. This is a surface injury, not a sign of basal skull fracture. It appears that the scrape behind the right ear, as well as the scrape behind the left ear and the "bruising" of the left eye was misinterpreted as indications of basal skull fracture. No evidence of basal or calvarial skull fracture was present at autopsy. The superficial nature of these injuries suggests that they occurred as a result of emergency medical intervention. I disagree with Dr. Chadwick's testimony (P.R.T. 153-53) that there are multiple major impacts; the fact that the external scrapes and bruises are small and superficial is not representative of significant trauma to multiple sites. A number of other "bruises" evident in photographs of Phillip's body are also representative of results of medical intervention, such as needle punctures for blood sampling and similar procedures. Specifically, such medically related findings are present on the right foot, left hand, and in the crook of the right elbow.

27. Extensive subgaleal (under the scalp) hemorrhage is present, predominately on the left side. The extent of hemorrhage is reflective of the development of disseminated intravascular coagulation, or DIC during Phillips' hospitalization, not of the severity of the initial trauma. DIC is a condition wherein tiny clots form in multiple small blood vessels, using up the body's clotting proteins and stimulating the clot dissolving mechanisms; this ultimately results in excessive bleeding. Such a finding should not be interpreted as an indication of multiple impact points on the scalp, as it is not a reliable indication of such.

A substantial left subdural hemorrhage is also shown. No subdural hemorrhage is seen on the right. It should be noted that no subarachnoid hemorrhage was found at autopsy. This limited distribution of bleeding within the head is consistent with an accidental fall with an impact on the left rear portion of the head. The brainstem hemorrhages found at autopsy are typical Duret hemorrhages secondary to brain swelling and hypoxia. In simpler terms, this area of bleeding is purely secondary to the swelling of the brain from lack of oxygen, and is not representative of a separate area of injury from the initial episode of trauma.

28. In summary, Phillip Buell suffered a fall to a hard surface, resulting in a severe blunt head injury resulting in substantial left subdural hemorrhage, rapid brain swelling (malignant cerebral edema) and respiratory arrest. Phillip's injuries are entirely consistent with the events as initially held by Mr. Marsh, that Phillip fell off of a sofa - probably off of the sofa arm. A probable scenario has Phillip jumping on the sofa or climbing on the arm or back of the sofa, perhaps in pursuit of some attractive object on the mantle. The sofa arm itself was nearly three feet above the floor, or 1-1/2 feet above the raised brick hearth. Adding Phillip's standing height of approximately 37-1/2 inches (from the autopsy report), the total distance his head would fall would be about 4-1/2 feet; if he fell from the back of the sofa, the total distance would be perhaps 5-6 feet. Falling backward from such a position would result in an impact to the back of his head in the left occipital region; landing on a hard and "unforgiving" surface, i.e. brick fireplace hearth, would magnify the effects of the impact on landing, and the breaking of a glass

ashtray located on the hearth, during the landing impact, would explain sharp force injury to the neck. A sudden stop against a hard surface primarily with the left occipital head, likely causing a degree of "whiplash" or rotational injury as well, explains the spectrum of head injury findings in Phillip's case.

29. The lack of verified skull fracture, lack of significant surface injuries of the scalp, and unilateral nature of the subdural hemorrhage contradict the concept that multiple severe blows were struck to Phillip's head. In this regard, Drs. Chadwick, Williams and Wolf testimony is inaccurate. Dr. Williams' finding that the brainstem hemorrhage was a contusion — the result of trauma from an additional blow - is inaccurate (P.R.T.99). The location of the hemorrhage is classic for Duret hemorrhage, which is a secondary condition arising as a complication of brain swelling and hypoxia. The presence of retinal hemorrhages in this case should not be assumed to contradict an accidental injury. The explanatory mechanism for retinal hemorrhages remains unknown in cases of childhood head injury, and retinal hemorrhages may be seen in cases that do not involve trauma of any sort.

30. In my opinion the cause of Phillip's death has never been adequately analyzed from a forensic viewpoint. There is no evidence that a forensic pathologist was involved or consulted in the case until several years after the trial. I find that the analysis of possible injury mechanisms performed prior to trial by various medical doctors was overly simplistic. The fact that a case of this type was not examined at autopsy by a fully qualified forensic pathologist experienced in childhood trauma deaths is at the very least unfortunate and, in this case, disastrous.

31. In the performance of Phillip's autopsy, there are a number of lapses from proper procedure for the handling of a forensic case involving fatal head trauma:

It appears from the autopsy report (2352) and from Dr. Williams' testimony (P.R.T. 99) that the brain was not examined by a neuropathologist, only by Williams himself. The eyes were not removed for microscopic examination of the retinal hemorrhages. Despite having taken samples of various fluids and tissues for testing (blood, urine, liver, bile, brain, lung, heart tissue, and kidney tissue), none of the material was saved to allow for any further testing (P.R.T. 118). There is no record of examination of the tongue, despite the history suggesting seizure activity. Dr. Williams took a bone marrow sample but didn't examine it microscopically. (P.R.T. 120; R.T. 517-518.) Dr. Williams found hemosiderin in sections of dura, but did not adequately document the location of origin for the dura tissue samples (R.T. 508-509.)

32. In addition, all of the medical record evidence was not considered in determining Phillip's cause and manner of death. Dr. Williams offered the opinion that Phillip showed no indication of a bleeding problem (529) but, in fact, laboratory testing performed on 4/27/83 was inadequate to truly establish the lack of any bleeding problem. I have reviewed the Declaration of Michael Innis, M.D. I agree with Dr. Innis that there is substantial evidence that Phillip had a longstanding Mononucleosis infection predating his head injury that created a coagulopathy. This diagnosis is also substantiated by the 1994 and 1996 E.B. virus positive laboratory results. I defer to Dr. Innis's expert hemotological findings

explaining Phillip's diseases and bleeding disorder.

33. I have reviewed Exhibit 13, Dr. Chadwick's 5/17/83 medical records review summary (1939-1943). I agree with and adopt Dr. Innis's testimony that this summary is inaccurate and misleading. I have served on child death review teams and committees for many years. In determining whether a child's death is accidental or caused by intentional abuse it is absolutely essential to consider all of the evidence and medical records pertaining to the child. Some diseases have symptoms that can lead erroneously to child abuse findings if all of the information is not considered. Dr. Chadwick's 5/17/83 summary completely leaves out Phillip's coagulopathy and disease symptoms to support the theory of "non-accidental injury." Phillip was not a battered child.

34. I have reviewed Dr. Schweller's declaration. I agree with his conclusion that a pre-existing bleeding problem predating a fall would magnify the brain injuries. Not only do the Kaiser records support the diagnosis of a coagulopathy, but the autopsy photos demonstrate the development of a large hematoma under the scalp following placement of an intracranial pressure monitor; this area of bleeding also extended over the left side of the forehead to the upper eyelid. There are also bruises on the back of the neck and under the chin which correspond to the placement of a cervical collar and opening of the mouth for intubation, and there are ecchymoses surrounding needle punctures on the extremities.

35. I also agree with Dr. Schweller's testimony that the Mannitol transfusion probably exacerbated Phillip's intracranial bleeding. I base this on the following facts:

a. Phillip was breathing spontaneously at Alvarado Hospital with ventilated assistance. No retinal hemorrhages were observed when he was initially evaluated at that time.

b. The timing of bruising to Phillip's body. None of the paramedics reported bruising in their reports. Paramedic Jones testified that Phillip did not have any bruises, discolorations, swelling to the front or top half of his head or face. (R.T. 170.) Paramedic Palmer testified that none of Phillip's swelling on the left side of his face or around his left eyelid or discoloration was visible when she was treating Phillip at the scene. (R.T. 597.) The only bruising documented in Dr. Strauss's contemporaneous notes of his physical examination is (1737 "old bruise right toe")

c. Dr. Johnston's report. He reports upon transfer that only "a small occipital hematoma was noted." (2231) However, on arrival to Children's Hospital at 1:30 p.m., the CAT scan showed "a massive occipital and left-sided parietotemporal scalp hematoma." He also reports: "This had been noted to increase rather rapidly in size during transport and during Phillip's CAT scan." (2232)(2236) His handwritten progress records states: "En route his scalp hematoma enlarged in size and significant external hemorrhage was noted" (2237).

36. I base my testimony on years of forensic experience in the child death review process, in death investigation and in the performance of

medicolegal autopsies, including several hundred involving childhood injury of both accidental and intentional causation. I have reviewed the coroner's investigation report. In determining Phillip's manner of death, the medical history, hospital records and effects of medications were not properly considered. The lack of a thorough investigation and a forensic autopsy in Phillip's case resulted in a false interpretation of medical and forensic evidence, resulting in a murder conviction for a death that should have been classified as accidental.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed at _____, California on October _____, 2002.

By: GREGORY REIBER, M.D.