## Expert Evidence and the Spectre of Wrongful Convictions

## John Coldrey May 2013

The Courts are becoming increasingly reliant on the evidence of forensic experts such as pathologists, medical practitioners, dentists, anthropologists and scientists.

If the evidence of these experts is unreliable through ignorance, negligence, bias, arrogance or plain dishonesty, innocent people can be convicted.

And there is nothing more calculated to reduce confidence in the criminal law, and hence the rule of law, than wrongful convictions.

In the USA, the number of persons wrongfully convicted lead to the establishment, in 1992, of The Innocence Project.

According to its Website its mission is "to free the staggering number of innocent people who remain incarcerated, and to bring substantial reform to the system responsible for their unjust imprisonment"

Some figures relating to its operations:

- 305 persons have been exculpated through DNA analysis
- The average time they served in prison was 13.6 years; 18 had spent time on death row.

The leading causes of these wrongful convictions included:

- Misidentification (71%)
- False confessions (25%)
- Police and prosecutorial misconduct, and invalidated or improper forensic science (50%)

These figures indicate that the problems in many cases were multi-faceted.

Emphasis on DNA exoneration means that only that limited group of cases – where DNA is deposited and detected, and is relevant in identifying the alleged perpetrator - can be re-examined using DNA profiling techniques. This will usually be in murders and rapes.

A word of caution about DNA evidence. DNA is often regarded as the infallible genetic fingerprint which demonstrates the guilt of an accused person. What it does in fact is to raise the possibility that the accused is the offender.

It is fallacious to simply convert a statistical probability that an individual might be guilty of the offence charged, into a finding that he or she was; and dangerous to rely on DNA evidence alone.

This is quite apart from the fact that placing a person at the scene of a killing – even as a perpetrator of fatal violence; or demonstrating that person has had intercourse with a complainant will not answer questions as to whether there was murderous intent in the first instance, or an intent to have sexual intercourse without consent, in the second.

These factors relate to the state of mind of the accused which the prosecution must prove.

Nonetheless, DNA analysis provides an excellent tool for eliminating suspects from a police investigation (as The Innocence Project illustrates)

What is the Canadian experience?

In 2008, Justice Stephen Goudge of the Ontario Court of Appeal completed an Inquiry into Paediatric Forensic Pathology in Ontario

It followed a review of 45 cases involving a Dr Charles Smith – a pathologist who dominated the field of paediatric forensic pathology in Ontario in the 1990's.

The reviewers, 5 eminent forensic pathologists with international reputations, identified 20 cases where Dr Smith's conclusions were not reasonably open. Twelve of those cases had resulted in findings of guilt. I will refer to 3 of them. I can do no better than quote from Justice Goudge:

"The first is Jenna's case. On 21 January 1997, at about 5pm, Jenna's mother went out for the evening, leaving Jenna in the care of the 14 year old boy who lived in the upstairs apartment. Jenna was 21 months old. Just after midnight, the boy realised Jenna had stopped breathing and got his mother to call an ambulance. At the hospital, an emergency physician noticed some signs of a possible sexual assault. Jenna died at 1.50am. She had severe injuries to her abdomen. Because Jenna had been in the care of her mother up to 5.00pm and of the 14 year old boy after that, the time of infliction of these injuries was critical. Dr Smith performed the autopsy but did not conduct a complete sexual assault examination. His first opinion, given verbally to the police at the autopsy, was that Jenna's injuries occurred within a few hours of death. A month later, after viewing the tissues under the microscope, he told police that her injuries could have occurred some 24 hours before death, and, as a result, her mother was arrested and charged with murder, and Jenna's older sister was taken from the family by the child protection authorities, and placed in care.

At the mother's preliminary hearing, Dr Smith's evidence left the clear impression that Jenna's injuries all occurred at the same time, some 24 - 48 hours before her death. Not surprisingly, Jenna's mother was committed for trial on the murder charge. As the case proceeded towards trial, the defence gathered a number expert opinions that concluded that the fatal injuries must have been inflicted less than six hours before Jenna's death. Faced with this, the Crown withdrew the murder charge on 15 June 1999, and a month later Jenna's sister was returned to her mother. The international experts who reviewed the case for the Chief Coroner concluded that there was simply no pathology evidence to support the opinion Dr Smith gave in evidence about the timing of the injuries. They agreed that the fatal injuries were likely less than six hours old.

Jenna's mother and Jenna's surviving sister thus lived with the consequences of flawed pathology for two and a half years. It left both of them permanently scarred. Equally important, the babysitter escaped scrutiny for too long. Once the pathology opinion had changed, the police were able to gather additional evidence with the result that the babysitter ultimately pleaded guilty to manslaughter.

The second example is Sharon's case. Sharon died in June 1997. She was seven and a half years old. She was found dead in the basement of her home. She had obviously been savagely attacked. Her body displayed dozens of penetrating wounds. Although he had very little experience with penetrating wounds, Dr Smith performed the autopsy. He told the police that the cause of death was loss of blood due to multiple stab wounds. Thus, the

mother was charged with murder. At her preliminary hearing, Dr Smith was unequivocal that Sharon had suffered multiple stab wounds, possibly inflicted by scissors, despite the fact there had been a pit bull in Sharon's house that day. He deemed as completely absurd defence suggestions that Sharon had been killed in a dog attack.

Once again, the defence was able to gather a number of reputable contrary opinions, forcing the Crown to withdraw the charge but only three and a half years after it had been laid. The expert reviewers found that Dr Smith's errors in Sharon's case were basic. He lacked the forensic pathology training and experience required to properly assess Sharon's penetrating wounds. He turned what the reviewers said were clearly dog bites into something much more sinister, at a terrible cost both to individuals and to public faith in the criminal justice system.

The final example is Valin's case. She died in June 1993, at the age of four. On the evening of 26 June 1993, she had been left in the care of her uncle, William Mullins-Johnson. The next morning, her mother found Valin dead in her bed. Dr Smith was consulted on the case and was an important witness at William's trial for murder. He testified that Valin had died of asphyxia, possibly due to manual strangulation. He also told the court there was evidence of recent sexual abuse. William was convicted of first degree murder on 21 September 1994, and was imprisoned. Over a decade later, the expert reviewers confirmed that Dr Smith had relied for his conclusion on post-mortem artefacts (an artefact for this purpose being a change in the body caused by medical intervention at the post mortem) and that there was no pathology evidence either of strangulation or sexual assault, indeed no pathology evidence of any crime at all. As a result, William's conviction was reversed by the Ontario Court of Appeal, and he was released, but only after more than 12 years in jail.

The human cost of flawed pathology was graphically captured at the Commission hearing. During his testimony at the Inquiry, Dr Smith was invited to apologise to Mr Mullins-Johnson, who was pointed out to him in the audience. Struggling with emotion, Dr Smith offered his apology. Mr Mullins-Johnson's spontaneous and deeply moving response is an eloquent testament to the human cost of failed pathology where a child dies in suspicious circumstances. This was their exchange:

DR CHARLES SMITH: Could you stand, sir?

(BRIEF PAUSE)

DR CHARLES SMITH: Sir, I don't expect that you would forgive me, but I do want to make it - I'm sorry. I do want to make it very clear to you that I am profoundly sorry for the role that I played in the ultimate decision that affected you. I am sorry.

MR WILLIAM MULLINS-JOHNSON: For my healing, I'll forgive you but I'll never forget what you did to me. You put me in an environment where I could have been killed any day for something that never happened. You destroyed my family... They hate me because of what you did to me. I'll never forget that but for my own healing I must forgive you."

In February 2011 the College of Physicians and Surgeons of Ontario stripped Dr Smith of his medical licence for professional misconduct and incompetence. In the same month the Ontario Court of Appeal set aside the conviction and life sentence of Tammy Marquart for the murder of her two year old son, citing the flawed evidence of Smith. She had spent almost 14 years in prison.

Let's move to Britain.

In 1997 the Criminal Cases Review Commission was established in the United Kingdom. Its remit was to review possible miscarriages of justice in the Criminal Courts of England, Wales, and Northern Ireland, to refer appropriate cases to the Appeal Courts.

In the 15 years to the end of 2012, 466 cases had been referred to the Court(s) of Appeal which had quashed 328 of the convictions.

The test applied is "the safety of the conviction". In its Annual Report of 2010/11 the Commission identified the following systemic factors in cases where the convictions were quashed:

- Insufficient or misguided investigations
- Fabricated or suppressed evidence
- Confessions obtained through duress
- Misconceived expert evidence

It is the last of these factors which I want to examine because it can be a potent recipe for injustice.

In 1999, Sally Clark, a 36 year old solicitor, of previous good character, stood trial for the murder of her two sons Christopher (11 weeks old) and Harry (8 weeks)

The post mortems were performed by a Dr Alan Williams. In the case of Christopher, the initial finding was that death had resulted from a lower respiratory tract infection, although the case was treated as one of SIDS (Sudden Infant Death Syndrome). In the case of Harry, the doctor was of the opinion that the cause of death was an episode of shaking. Dr Williams then changed his conclusion as to the cause of the first death (Christopher) to one of smothering.

Mrs Clark, who had discovered each of the children unconscious in "a bouncy chair", denied any wrongdoing.

At the trial, the prosecution called Professor Sir Roy Meadow, a professor of paediatrics and child health, and originator of the controversial Munchausen Syndrome by Proxy which purports to the identity a pattern of behaviour in which a care giver deliberately exaggerates, fabricates or induces, physical, psychological, behavioural or mental health problems in those children who are in their care. (But the reliability of that syndrome is another story)

Professor Meadow was not averse to colourful language. In the course of his evidence he testified that in a family where parents do not smoke, at least one is a wage earner, and the mother is under 26, the risk of a SIDS death is 1 in 8,543. This figure was apparently based on a report issued by the Confidential Enquiry into Stillbirths and Deaths in Infancy (CESDI). However, the statistical information in the report was designed to help identify families at a higher risk of SIDS. It did not suggest that statistical information "would enable the diagnosis of an unnatural death in an individual case".

But Professor Meadow went further. He extrapolated that the odds of two children from a family with Clark's socio-economic characteristics, dying of SIDS, was 1 in 73 million.

Warming to his topic, he described the odds as akin to backing the winner of the Grand National Horserace at 80 to 1, four years in a row.

Not content to leave it at that, and using the figure of 700,000 live births yearly in England and Wales, the Professor asserted that the happening of two deaths in the one family from unidentified natural causes, would occur about once in every hundred years.

There was evidence of minor injuries to Christopher which were consistent with efforts to resuscitate him. There was a conflict of experts as to whether some injuries, purportedly observed on Harry, were indicative of shaking. In the event, Mrs Clark was convicted of two counts of murder by a majority verdict (10-2). She received a mandatory life sentence.

Given the apparent cogency of Professor Meadow's evidence as to the odds against natural causes of death, the verdict was, perhaps, unsurprising.

The surprises were yet to come. It became clear that Meadow's use of statistics was totally flawed. Insofar as statistics are relevant at all in cases of this nature, the figures involved could have been as low as 1 in 150. Indeed, the Royal Statistical Society issued a public statement, expressing its concern at the "misuse of statistics in the Courts".

Despite the furore, the English Court of Appeal upheld the conviction. It was of the opinion that the trial judge had placed Professor Meadow's statistical evidence in context, and the jury were entitled to accept the medical evidence adduced by the prosecution, and to convict. So Mrs Clark languished in prison.

I am unsure of exactly how it came to light but it emerged that Dr Williams, the prosecution pathologist, had failed to provide the prosecution with evidence of microbiological tests that had been conducted on the second child, Harry.

Those tests had revealed the presence of staphylococcus aureus, a species of staphylococci. The infection had spread to the child's cerebral spinal fluid. Within the ambit of this infection is meningitis.

As a result of this new evidence, Mrs Clark's case was referred by the Criminal Case Review Commission, to the Court of Appeal.

So, a second Appeal ensued. Amongst the fresh medical evidence was the opinion of Professor James Morris, a consultant pathologist, who expressed the view that, in light of the results of the hitherto undisclosed testing of the samples obtained by Dr Williams, Harry had probably died of natural causes.

The Court was mightily unimpressed by the conduct of Dr Williams, and by Professor Meadow's venture into statistics.

(But more of that later)

In 2003, the Appeal of Sally Clark was upheld and her convictions quashed. She had served more than 3 years imprisonment. Mrs Clark never recovered from the twin traumas of the death of her children and her wrongful imprisonment for their murder. She developed psychiatric problems and a dependency on alcohol. She died in 2007 aged 47.

It might be argued that the fact the flawed statistical evidence was allowed to be placed before the jury represented a systemic failure to which judge and counsel also contributed.

Before leaving Clarks case it is worth recording the comments of the Court of Appeal upon the approach taken by the prosecution because such remarks have broader implications. "The prosecution put their case at trial in the following way. First they pointed to a number of similarities and the detailed history of the death of each child which they suggested went far beyond coincidence. They submitted that in such circumstances where there was no evidence in each case to suggest that the child had died from natural causes, the inference could safely be drawn that the death resulted from the act of the person in whose care the child was when he suddenly became unwell, namely the appellant. The similarities [insofar as they are relevant to this analysis] were:

- 1. Christopher and Harry were about the same age at death namely 11 weeks and 8 weeks.
- 2. They were both discovered unconscious by Mrs Clark in the bedroom , allegedly both in a bouncy chair.
- 4 Mrs Clark had been alone with each child when he was discovered lifeless.
- 5 In each case Mr Clark was either away or about to go away from home in connection with his work. ......

As to [these] factors, we fail to see how realistically on the facts of this case they can be thought to be any significant indication of murder. Some are open to real criticism. Babies are at their most vulnerable in the first few weeks of their life. Therefore it is difficult to see how any sort of adverse conclusion could properly be drawn simply from the fact that one died at 8 weeks old and the other at 11 weeks old. Children frequently spend the majority of the early part of their life in the sole care of their mother and hence it cannot in any way be said to [be] an unusual feature for just two events to occur when the babies are in the mother's sole care. The suggestion that the coincidence of the fact that Mr Clark was going out on the night when Christopher died and the fact that he was going away the day after Harry died were in some way significant is one we cannot accept. In the ordinary incidence of family life, it could be anticipated that some imprecise similarity of this kind could always be found. If there was any evidence, which there was not, that on each occasion the appellant had been distressed by the absence of her husband, we could begin to see that the coincidence of distress might be thought to be significant but otherwise we fail to see the relevance"

In the meantime, Professor Meadow had continued to give evidence, (albeit not in such flamboyant form). He adhered to his mantra often described as "Meadow's Law", that one sudden infant death is a tragedy, two is suspicious, and three is murder unless proved otherwise.

In 2002, Angela Cannings, described as a loving and caring mother, faced trial for the murder of two of her children, Jason, who died in 1991 aged 7 weeks, and Matthew, who died in 1999, aged 18 weeks. Earlier, in 1989, her daughter Gemma had died at 13 weeks. The lives of each of the children had also been punctuated by an acute or apparent life threatening episode (referred to in the medical literature by the acronym ALTE)

There was no direct, and very little indirect evidence to suggest that crimes had been committed. But the prosecution proceeded upon the basis that the sheer number of deaths and multiple ALTES (including Gemma's death which was not the subject of a charge), lead inexorably to the conclusion that the children had been murdered.

The alleged method was smothering. On this occasion, Professor Meadow's evidence did not extend to flawed statistics but he described 3 cot deaths in the same family as "implausible".

There was a plethora of conflicting medical evidence but ultimately Mrs Cannings was convicted of murder and sentenced to life imprisonment.

By the time Cannings case reached the English Court of Criminal Appeal, the case of Sally Clark had been decided and medical science had, perhaps, advanced.

After Angela Cannings' conviction there was considerable public agitation and her case was featured in a BBC programme "Real Story",

It transpired that in her family her paternal great grandmother had experienced the death of one child which may have qualified for the characterisation of SIDS, whilst there had been two such occurrences in her paternal grandmother's family.

On that BBC programme, a Professor Michael Patton, a clinical geneticist at St Georges Hospital Medical School, stated that a genetic inheritance was the most likely explanation for the crib deaths in the Cannings family.

Professor Patton reiterated this view in material presented to the Appellate Court. That Court also had before it the observations of Professor Jean Goldring, a professor of paediatric and pre-natal epidemiology, who described human genetics "a very complicated story with much research yet to be done". She stated: "Genetics at the moment is such that there are new discoveries all the time. Things that we have no idea about are being revealed every day... There is a lot of work to be done and, once we have looked at 30,000 genes, we should have a clearer idea of what we should be looking at".

By the time of Cannings' appeal, medical research had undermined the contention that two unexplained child deaths in any one family was a rarity.

Indeed in the case of Trupti Patel (an English pharmacist), tried in June 2003 for the murder of her 3 children, whose deaths were unexplained, Professor Michael Patton told the court that several deaths in the same family could be caused by an undiscovered genetic defect. He stated that the chances of experiencing more than one cot death in a family could be as high as 1 in 20.

Perhaps significantly, Mrs Patel's paternal grandmother lost 5 of her 12 children in infancy. The jury acquitted her of all charges.

After assessing all the evidence in the Cannings case (including fresh medical evidence) the Appeal Court quashed her convictions. She had served 18 months imprisonment. The court concluded: "We are satisfied that there is a realistic, albeit as yet undefined, possibility of a genetic problem within this family which may serve to explain these tragic events"

The Court also made some comments as to how cases such as these should be approached. As a former judge I (naturally) think they are worth quoting:

"It would probably be helpful at the outset, to encapsulate different possible approaches to cases where three infant deaths have occurred in the same family, each apparently unexplained, and for each of which there is no evidence extraneous to the expert evidence, that harm was or must have been inflicted (for example, indications or admissions of violence or pattern of ill treatment). Nowadays such events in the same family are rare, very rare. One approach is to examine each death to see whether it is possible to identify one or other of the known natural causes of infant death. If this cannot be done, the rarity of such incidents in the same family is thought to raise a very powerful inference that the deaths must have

resulted from deliberate harm. The alternative approach is to start with the same fact, that three unexplained deaths in the same family are indeed rare, but thereafter to proceed on the basis that if there is nothing to explain them, in our current state of knowledge at any rate, they remain unexplained and still, despite the known facts that some parents do smother their infant children, possible natural deaths.

It will immediately be apparent that much depends on the starting point which is adopted. The first approach is, putting it colloquially, that lightning does not strike three times in the same place. If so, the route to a finding of guilt is wide open. Almost any other piece of evidence can reasonably be interpreted to fit this conclusion. For example, if a mother who has lost three babies behaved or responded oddly, or strangely, or not in accordance with some theoretically 'normal' way of behaving when faced with such a disaster, her behaviour might be thought to confirm the conclusion that lightning could not indeed have struck three times. If, however, the deaths were natural, virtually anything done by the mother on discovering such shattering and repeated disasters would be readily understandable as personal manifestations of profound natural shock and grief. The importance of establishing the correct starting point is sufficiently demonstrated by this example."

The Court in Cannings also said:

"We recognise that the occurrence of three sudden and unexpected infant deaths in the same family is very rare, or very rare indeed, and therefore demands an investigation into their causes. Nevertheless, the fact that such deaths have occurred does not identify, let alone prescribe, the deliberate infliction of harm as the cause of death. Throughout the process great care must be taken not to allow the rarity of these sad events, standing on their own, to be subsumed into an assumption or virtual assumption that the dead infants were deliberately killed, or consciously or unconsciously to regard the inability of the defendant to provide some convincing explanation for these deaths as providing a measure of support for the prosecution case. If, on examination of all the evidence, every possible known cause has been excluded, the cause remains unknown.

We have read bundles of reports from numerous experts of great distinction in this field, together with transcripts of their evidence. If we have derived an overwhelming and abiding impression from studying this material, it is that a great deal about death in infancy, and its causes, remains as yet unknown and undiscovered... Much work by dedicated men and women is devoted to this problem. No doubt one urgent objective is to reduce to an irreducible minimum, the tragic waste of life and consequent life-scarring grief suffered by parents. In the process, however, much will also be learned about those deaths which are not natural, and are, indeed, the consequence of harmful parental activity. We cannot avoid the thought that some of the honest views expressed with reasonable confidence in the present case (on both sides of the argument) will have to be revised in years to come, when the fruits of continuing medical research, both here and internationally, become available. What may be unexplained today may be perfectly well understood tomorrow. Until then, any tendency to dogmatise should be met with an answering challenge".

To complete this "Cooks tour" of the English cases, I should mention R v Donna Anthony, a 1998 trial in which Professor Meadow proffered the view that two cot deaths in the same family was "extraordinarily unlikely". Ms Anthony was convicted of the murder of her two

children. Her Appeal against these convictions, heard in 2005, was not opposed by the Crown (She had served 6 years of a life sentence).

As an addendum to the British cases, the subsequent fortunes of two of the key players, Dr Alan Williams and Sir Roy Meadow may be of interest. Following complaints to the General Medical Council (GMC) made on behalf of Sally Clark, Professor Meadow was struck off the Medical Register for serious professional misconduct. After a series of Appeals he was reinstated. Nonetheless, the Appellate Court found that the Professor was not a statistician, and had no relevant expertise to entitle him to use the statistics in the way he did. Criticism was also levelled at the colourful manner in which he gave his evidence. Statistics, the Court found, were irrelevant and should never have been put before the jury. The Presiding Judge, Sir Anthony Clark MR (no relation to Sally Clark) ruled that "This type of mathematical calculation is only valid if each of the deaths is truly independent of each other without the shared genetic and environmental circumstances of the children being members of the same family".

Little wonder, therefore, that such statistical evidence is now routinely excluded by the Courts in jury trials.

Sir Anthony Clark found that Meadow was guilty of serious professional misconduct, but, given his long and distinguished service to the public, and his age (73), this finding itself was sufficient penalty without erasure from the Register of Medical Practitioners. The two other judges found him guilty of some (but not serious) professional misconduct and hence his disbarment from the Medial Register was unwarranted.

In October 2009, Meadow relinquished his status as a doctor/Professor after applying to the GMC to have his name removed from the UK Medical register.

Dr Williams was found guilty of serious professional misconduct by a GMC Fitness to Practice Panel in June 2005 for having failed to disclose the microbiology tests but he was absolved from having acted in bad faith. The Panel directed that he was not to undertake any Home Office pathology, or Coroners Cases, for a period of 3 years. An appeal against this ruling was dismissed in November 2007. Dr Williams was subsequently reinstated by a Fitness to Practice Panel (having voluntarily abstained from pathology practice for some 2 years pending the hearing of his Appeal). His reinstatement was on the basis that he had made an honest, albeit serious, error which was not likely to be repeated, and which he had not sought to conceal.

The Australian Legal System has also had to grapple with the vexing and troubling cases of early childhood deaths.

In 2003, a NSW jury convicted Kathleen Folbigg of the homicide of her four children; Caleb (19 days) Patrick (8 months) Sarah (10 months) and Laura (7 months). The verdict in the case of Caleb was one of manslaughter and in the cases of the other three children murder. Initially, the causes of death were found to be:

Caleb – SIDS

Patrick – no detected cause

Sarah – unknown natural causes

Laura – undetermined causes

The prosecution case at the trial was that each had been smothered. There was considerable conflict between the medical experts as to each of the causes of death. The trial judge instructed the jury that in each case there were three possibilities open on the evidence; identified natural causes, unidentified natural causes, and deliberate suffocation. As a principled approach that is unexceptionable. It was up to the jury to evaluate the medical evidence.

No doubt the jury could consider, as a piece of circumstantial evidence, the rarity of four unexpected and unexplained deaths in the one family, but it is difficult to see how four unexplained deaths could, without more, form the basis of a finding beyond reasonable doubt of homicide by smothering.

However, in Folbigg's case, unlike the case of Angela Cannings, the prosecution had more.

It had a diary with entries which it claimed were damning.

I'll give you some brief examples with the qualifications that they are extracted from longer entries, and that Mrs Folbigg advanced explanations for them when interviewed by investigating police. The defence claimed the diary entries were ambiguous. Indeed words such as "guilt" "responsibility" and "mistake" may have varying connotations. Self blame is a common response to infant deaths. And when Mrs Folbigg was asked about these comments in the police interview she said "After four what are you supposed to think?"

Here are the extracts:

"3 June 1990: This was the day that Patrick Allan David Folbigg was born. I had mixed feelings this day. Whether or not I was going to cope as a mother or whether I was going to get stressed out like I did last time. I often regret Caleb and Patrick, only because your life changes so much, and maybe I'm not a Person that likes change. But we will see.

18 June 1996: I'm ready this time. And I know I'll have help and support this time. When I think I'm going to lose control like last time I'll just hand baby over to someone else... I have learned my lesson this time.

4 December 1996: [Found out she was pregnant] I'm ready this time. But have already decided if I get any feelings of jealousy or anger too much I will leave Craig [husband] and baby, rather than answer being as before. Silly but will be the only way I will cope.

1 January 1997: Another year gone and what a year to come. I have a baby on the way [Laura]. This time I am going to call for help this time and not attempt to do everything myself anymore. I know that that was the main reason for all my stress before and stress made me do terrible things.

4 February 1997: Still can't sleep. Seem to be thinking of Patrick and Sarah and Caleb. Makes me generally wonder whether I am stupid or doing the right thing by having this baby. My guilt of how responsible I feel for them all, haunts me, my fear of it happening again haunts me... What scares me most will be when I'm alone with baby. How do I overcome that? Defeat that?

25 October 1997: I cherish Laura more, I miss her [Sarah] yes but am not sad that Laura is here and she isn't. Is that a bad way to think, don't know. I think I am more patient with Laura. I take the time to figure out what is wrong now instead of just snapping my cog... Wouldn't of handled another like Sarah. She's [Laura] saved her life by being different.

29 October 1997: felt a little angry towards Laura today. It was because I am and was very tired... she [Laura] doesn't push my button anywhere near the extent she [Sarah] did. Luck is good for her is all I can say.

9 November 1997: ... he [Craig] has a morbid fear about Laura... well I know there's nothing wrong with her. Nothing out of ordinary any way. Because it was me not them... With Sarah all I wanted was her to shut up. And one day she did.

28 January 1998: I've done it. I lost it with her. I yelled at her so angrily that it scared her, she hasn't stopped crying. Got so bad I nearly purposely dropped her on the floor and left her. I restrained enough to put her on the floor and walk away. Went to my room and left her to cry. Was gone probably only five minutes but it seemed like a lifetime. I feel like the worst mother on this earth. Scared that she'll leave me now like Sarah did. I know I was short tempered and cruel sometimes to her and she left. With a bit of help. I don't want that to ever happen again...

1 April 1998: Thought to myself today. Difference with Sarah, Pat, Caleb to Laura, with Laura I'm ready to share my life. I definitely wasn't before".

The Appellate Court described these entries as "chilling reading" in light of the known history of the children. This material, in itself, distinguished this case from the situation that existed in Angela Cannings' prosecution. The court dismissed the Appeal. Similarly the High Court, when it refused Folbigg's application for special leave to appeal, was of the view that the diary entries "lend very cogent weight to what inferences can be drawn from the unexplained deaths"

The battle to overturn Kathleen Folbigg's conviction continues in the public arena. Emma Cunliffe, an Assistant Professor of Law at the University of British Columbia, has written a book "Murder Medicine and Motherhood" (published in 2011) in which she advances the proposition that Mrs Folbigg was wrongfully convicted.

Incidentally, since I am supposed to mention the media in this talk, there is a chapter entitled "Media Monster" in which the author analyses the reportage of this case. She asserts it was selective, and effectively promoted the prosecution case. More recently, in the Fairfax media, The Good Weekend Magazine of  $2^{nd}$  February 2013 questioned the validity of the conviction in an article headed "Did she do it?"

At a more academic level the challenge of achieving a legally and medically fair result in a trial that is based largely on circumstantial evidence was the subject of a recent article in the Australian Journal of Forensic Sciences entitled "The Case of Kathleen Folbigg: How did justice and medicine fare?" The authors from the School of Psychology, University of New South Wales, examined the medical evidence given at the Folbigg trial. In assessing the impact of the medical evidence, the authors are critical of the trial of the four cases together. In their view:

The case lays bare the inherent uncertainty and fallibility of medical opinion about the cause of an infant's sudden and unexpected death. Medical opinion is based to some degree on clinical judgment and, like any decision-making task, the subject of bias and error. The case illustrates how developing a legal argument that the accused has committed the crimes can transform circumstantial evidence, which may have been unrelated or innocent, into markers or "proof" of guilt. Numerous inferences were drawn to fit circumstantial evidence into a compelling argument to find the accused guilty. Inferences are as prone to error as professional judgment. Whether existing legal procedures can effectively minimise these errors is a separate issue.

Drawing upon the literature in the field of sudden unexpected and unexplained infant deaths, the writers' comment:

When an infant dies suddenly, autopsy examinations can provide a probable cause of death based on the available medical knowledge about likely mechanisms in other instances of infant death. However, autopsy examinations are unable to distinguish between SIDS and inflicted suffocation. The deaths of the Folbigg children were initially viewed as unrelated based on varying and uncertain causes reported following each autopsy. However, when a number of children die in one family without a physiological explanation (such as genetic or metabolic abnormalities), suspicion falls on those present at the death scene, typically one or both parents. This suspicion may not be justified if external signs of trauma are absent. Sudden Infant Death Syndrome (SIDS) is a term applied when an infant is found unexpectedly dead after sleeping with no cause of death ascertained. The syndrome is contentious, and there is limited agreement as to its symptoms, other than that it is unlikely to represent a single disease with a unique cause. Instead, SIDS may be a complex amalgam of predisposing factors, external stresses, and underlying vulnerability. Different factors may have different effects on different individuals. Primarily, SIDS is a phenomenon of early infancy (under 12 months) and unexpected deaths after one year of age are regarded as unusual. This definition is important, as it recognises that attributing a death to SIDS requires more than a thorough pathological evaluation. Many subtle natural diseases in infancy result in unexpected death, and infants may be seriously ill with few signs and symptoms. Similarly, the findings at autopsy in infants after accidental or inflicted asphyxia are often minimal... "as SIDS is diagnosed through a process of exclusion, the terms SIDS should not be used if there is" possible accidental asphyxia, inflicted injuries, or significant organic disease."

Reference is made to a recent study in which it was asserted that "not only can SIDS recur in one family but the risk of a second death increases after one SIDS death has occurred."

The view is expressed that:

If autopsy investigations have not yielded physical evidence of external trauma or suffocation, there is no physiological or pathological basis for a medical expert to concede or to raise the possibility of inflicted suffocation. In Folbigg, however, this is precisely what a number of medical experts conceded or raised in the absence of external physical evidence of inflicted suffocation for each of the four Folbigg children. Further, as inflicted death or murder is less common than any known medical cause of death in infants, and this statistical difference was not rigorously pursued by the defence, there is a real risk that undue weight was given by the medical experts and jurors to the explanation of inflicted death."

Later, the authors comment:

"Alone, none of the infant deaths was suspicious. At most, the cause of death was undetermined, meaning that medical investigations did not provide an explanation. Arguably, taken together, the four deaths were also not necessarily suspicious. The legal decision to admit evidence regarding four deaths forced medical experts to consider the meaning of these events in one family. The medical experts conceded that they had not seen, nor could they find in the literature, a case documenting four deaths without medical or natural cause. This hypothesis does not entertain the real possibility that separate, non-inflicted mechanisms were involved (such as subtle breathing/airway/apnoea issues, premature birth). It is not logically necessary to conclude that because a medical or natural account is unavailable, the cause must be inflicted death."

Under the heading Medical Opinion and Biases the writers remark:

"Notwithstanding the increasing body of science on which medicine is based, clinical judgment represents a substantial portion of medical decision-making. Research on decision-making has shown that clinical judgment and decision-making are often unreliable. However, the law appears to accept medical evidence as factual and objective on the basis that it is physical and measurable. The evidence of more than eight medical experts who testified in Folbigg, each espousing different views on a variety of medical issues, challenged the notion that there is one "correct" answer regarding the cause of the infant deaths....

The legal system assumes that evidence management (adversarial process, crossexamination, rules for admission of evidence, judicial warnings, deliberation) corrects for biases or errors involved in reasoning in the context of evidence proffered by medical experts. However, as medical opinion on causation is probabilistic and involves clinical judgment, it cannot be assumed that it is possible to arrive at an error-free "correct" view about the cause of death(s), either legally or medically. Clinical decision-makers use heuristics or cognitive short cuts in a similar manner to lay decision-makers, which in turn contribute to errors in clinical judgment."

The debate about Kathleen Folbigg's guilt or innocence remains squarely in the public arena. But in the absence of fresh evidence it is difficult to see how it could be resolved in her favour.

In 2007 a Victorian woman, Carol Matthey, was presented for trial for the murder of four of her children who died over a period of four years and four months between December 1998 and April 2003. At the time of their deaths the children were aged 7 months (Jacob) 10 weeks (Chloe) 3months (Joshua) and 3 years 5 months (Shania) They were survived by an elder brother Dylan, born in May 1997. None of the deceased children exhibited any signs of trauma.

The deaths were characterised as follows: Jacob and Chloe SIDS; Joshua Klebsiella septicaemia, (a type of bacteria responsible for severe inflammation of the lungs), and Shania "unascertained".

Nonetheless the Crown enlisted several of the medical experts who had given evidence in Folbigg's case to mount a case of induced asphyxia (i.e. smothering).

In essence, this proposition relied heavily on the fact of four deaths in the one family which was advanced as a sufficient basis to postulate homicide. This was completely contradictory to the autopsy findings of the very experienced pathologists who had performed the actual autopsies. Perhaps this motivated the Chief Crown Prosecutor to seek the advice of Professor

Stephen Cordner, the Director of the Victorian Institute of Forensic Medicine, and recognized as one of the world's leading forensic pathologists.

In the introductory remarks of his report Professor Cordner made the following point:

"Certainly, as forensic pathologists, we often evaluate autopsy findings in the light of supposed circumstances, or we try to recreate circumstances de novo from the autopsy findings. The core difficulty in this matter was the absence – on my view – or the paucity of autopsy findings allowing some type of recreation of the circumstances. In addition, forensic pathologists do not get into a consideration of circumstances of a psycho-social kind (e.g.: the fact "that one or more of the children might have been the result of an unwanted pregnancy") or that might indicate potential suspicion (that Ms Matthey was the last person to see the children alive) where those circumstances are unrelated to the autopsy findings or medical history. I believe that we are not necessarily equipped or trained to do that, and public prosecutors in courts are. In addition, they are probably not matters of expertise, and if that is so, pathologists are no better able to evaluate them than anyone else."

Professor Cordner emphasised that:

"... the diagnosis of SIDS is a diagnosis of exclusion. If a condition is found at autopsy capable of causing death which accords with the circumstances, it is elevated to the cause of death. There is a limit to what can reasonably be done to exclude other causes of death. For example, there are dozens of minor genetic mutations causing potentially fatal cardiac arrhythmias (e.g. long QT syndrome). [Long QT Syndrome can manifest itself in abnormal arrhythmia i.e. irregularity of the heartbeat] There can be mitochondrial DNA deletions or other mutations causing sub-microscopic abnormalities to heart muscles. The emotional weight of the case, ("it is easy to smother babies") outweighs the fact that the same pattern could occur in older children or young adults and the conclusion we would all come to would be an inherited arrhythmic disorder."

Later he said:

"I obviously accept that homicide is a possibility. I simply do not accept that a pathologist is in a position to make this conclusion on the information available in this case. I myself feel unable to make this conclusion. The causes of death as given remain a possibility. There may be merit in regarding the cases of death as "Unascertained" if genetic disease of some sort is regarded as possible. However, such a possibility is encompassed in the diagnosis of SIDS.

If the prosecutors and courts do not like coincidences, that is a matter for them... I leave open the possibility of conditions not well understood or yet to be discovered being properly included amongst the unknowns in this case."

Professor Cordner concludes his report with this admonition:

"In my view, it is wrong on the forensic pathology evidence available in this case to conclude that one or more of the Matthey children are the victims of a homicide. There is no merit in forcing certainty where uncertainty exists. The very existence

of the enigma of SIDS demonstrates how little we know about why some babies die. It is not for a pathologist to conclude that a number of infant or childhood deaths, with no significant pathological findings at all are homicides on the bases of controversial circumstantial grounds. If this case is to result in a prosecution, I want to clearly state there is no pathological basis for concluding homicide. The findings are perfectly compatible with natural causes. The findings cannot rule out smothering in one or more of the cases, but especially in the case of Shania, it is important that absolutely no signs of asphyxia or compression of the face are present." [Shania was aged 3 years 5 months at the time of her death.]

I know a little about this case, because I was the trial judge. So if you would permit me the self-indulgence, I will briefly quote my own words.

I ruled that the medical witnesses called by the Crown could go no further than express the opinion that induced asphyxia was a possible and consistent cause of death in the case of a particular child (assuming that to be the witness' ultimate opinion). However the Crown desired to go further, and argue that, in considering the cause of death of any individual child, the medical evidence in relation to the other children was relevant.

My response was as follows:

"I do not agree with this contention. Experts can point to the rarity of four unexpected and unexplained deaths in the one family on the bases of their experience and knowledge of the literature, but to utilise that factor in allocating a cause of death in an individual case is to indulge in impermissible "coincidence reasoning". Put another way, such an approach simply begs the question.

From a medical perspective, let it be assumed that one child has died from suffocation. It does not follow that this must be the cause of death of the other children. This is particularly so in circumstances where the deaths themselves are attributed by the original pathologists to disparate causes.

Insofar as there is medical evidence of the lack of any genetic or metabolic causes which may account for death, these are factors which may be considered in relation to each child. In the same way, the lack of any signs of physical injury or trauma to a particular child is a relevant medical fact to be taken into account in considering possible causes of death.

In cases of this nature, I have no doubt that the approach enunciated in Cannings case should be adopted. The rarity of the phenomenon of four unexpected and seemingly unexplained deaths in one family cannot, of itself, provide a cause of death.

In my view there is a distinction to be drawn between the embargo upon medical witnesses relying upon coincidence reasoning as a basis for assigning a cause of death and the approach which may be taken by the jury. The latter are entitled to take into account, as a piece of circumstantial evidence, the rarity of four infants in one family dying from unknown natural causes and to utilise it, along with other pieces of circumstantial evidence, in determining whether the Crown has succeeded in proving beyond reasonable doubt that the deaths were unnatural, and that the accused was responsible for them. This is a distinction between the role of the medical expert and that of the jury".

This was not a case in which the Crown had dramatic extraneous material potentially supportive of the medical opinions such as that provided by the Folbigg diary. Consequently, the prosecution cast about for additional circumstances to bolster its case.

These were purportedly found in the exigencies of the relationship between Mrs Matthey and her husband which, it was claimed, acted as a trigger for her to kill her children. A detailed analysis of this material demonstrated that this asserted link could not be established.

After my preliminary ruling on the evidence (which covered 90 pages with 17 pages of appendices detailing the medical evidence) the Crown reconsidered its case. Ultimately the Court was informed that the charges against Mrs Matthey would not proceed.

These relatively unique cases present real challenges for the legal process in dealing with expert medical opinion. The cases are both complex and emotional, and exact a heavy toll on all participants.

A salutary guide to the admissibility of expert evidence generally, is to be found in Makita (Australia) Pty Ltd v Sprowles (2001) 52 NSWLR 705. The principles summarised by Heydon J bear repeating:

"... if evidence tendered as expert opinion evidence is to be admissible, it must be agreed or demonstrated that there is a field of "specialised knowledge"; there must be an identified aspect of that field in which the witness demonstrates that by reason of specified training, study or experience, the witness has become an expert; the opinion proffered must be "wholly or substantially based on the witness's expert knowledge"; so far as the opinion is based on facts "observed" by the expert, they must be identified and admissibly proved by the expert, and so far as the opinion is based on "assumed" or "accepted" facts, they must be identified and proved in some other way; it must be established that the facts on which the opinion is based form a proper foundation for it; and the opinion of an expert requires demonstration or examination of the scientific or other intellectual bases of the conclusions reached: that is, the expert's evidence must explain how the field of "specialised knowledge" in which the witness is expert by reason of "training, study, or experience", and on which the opinion is "wholly or substantially based", applies to the facts assumed or observed so as to produce the opinion propounded. If all these matters are not made explicit, it is not possible to be sure whether the opinion is based wholly or substantially on the expert's specialised knowledge. If the court cannot be sure of that, the evidence is strictly speaking not admissible, and, so far as it is admissible, of diminished weight. And at attempt to make the basis of the opinion explicit may reveal that it is not based on specialised expert knowledge, but, to use Gleeson CJ's characterisation of the evidence in HG v. The Oueen [citation given] on "a combination of speculation, inference, personal and second-hand views as to the credibility of the complainant, and a process of reasoning which went well beyond the field of expertise".

By far the most notorious Australian case of wrongful conviction was that of Lindy Chamberlain. It has recently been critically examined by Professor Stephen Cordner, and much of what I want to say is drawn from his commentary in an article entitled "The curtain finally draws on the Chamberlain fiasco"

On the evening of 17<sup>th</sup> August 1980, the Chamberlain family were at a camping ground near Uluru in the Northern Territory. They, together with fellow campers, were enjoying a barbeque in an area set aside for that purpose.

At one point in the evening Lindy, accompanied by her 6 year old son Aidan, had left the barbeque area and she had placed her 9 week old baby girl Azaria in a bassinette in the family tent. She returned after an absence of 5 - 10 minutes together with Aidan. She had with her a can of baked beans as Aidan had said he was still hungry.

The evidence was that thereafter, a cry was heard by one of the campers which was identified as that of a baby. Mr Chamberlain said to his wife: "Was that the baby?" Mrs Chamberlain returned to the tent to check. When she was about 5 yards from the tent, she was heard by another camper (Mrs Lowe) to cry out "That dog's got my baby"

Mrs Lowe was independent of the Chamberlains, as was another camper, (Mrs West) who heard Lindy cry out "My God, my God, a dingo has got my baby!"

Despite an immediate search of the area, the body of Azaria was never found. On 19<sup>th</sup> August the Chamberlains returned home to NSW. The baby's jumpsuit, singlet and nappy were found a week later, about 4 kilometres from the camp site.

This event triggered huge media interest in Australia and internationally – interest which was framed by bias, fanciful rumours, cartoons and misinformation, generally directed at characterising the baby's parents and particularly Lindy as bad, even evil people. The finding of the first inquest, delivered on national television on February 20 1981, concluded that Azaria likely died as a result of a dingo attack, but that there was human involvement subsequently. The coroner was particularly critical of the police investigation. The police were stung into action and within a fairly short period had gathered "evidence" to justify a second inquest which in turn led to the trial of the Chamberlains in September - October 1982. Lindy was charged with murder, her husband, Michael, as an accessory after the fact to murder.

Despite the civilian evidence to which I have referred, the prosecution case was that during her absence from the barbeque area, Mrs Chamberlain took Azaria from her bassinette and into the couple's Holden Torana. She sat in the front passenger seat and cut the baby's throat. Azaria's body was probably initially left in the car (possibly in a camera bag) and later the same evening, was buried in the vicinity of the barbeque area by Mr or Mrs Chamberlain.

No motive was ever advanced for this killing.

The prejudice against the Chamberlains was very great. I know because I was living in the Northern Territory at that time. For example, during the trial, young women could be seen outside the Darwin Court house, wearing T shirts emblazoned with the words "The dingo is innocent"

The Crown mustered a crowd of so called experts on which to build its case.

The elements of the scientific evidence presented at the trial included:

- Blood was found in and around the front seat of the car, including in the camera case and on a pair of scissors, purporting to have within it foetal haemoglobin indicating it was baby's blood
- The blood under the dashboard was allegedly in a spray pattern, which was evidence of an arterial spurt, indicating that it was the site of the murder
- Blood found in the tent was transferred there by, or from the clothing of, Mrs Chamberlain
- Professor James Cameron a Professor of forensic science from the London Hospital, gave expert evidence that he could see the handprint in blood of a small adult hand on the baby's jumpsuit

- The damage to the baby's clothing could not have been caused by a dingo and was caused by a knife or scissors to simulate dingo damage
- No saliva was detected on the jumpsuit, meaning that a dingo could not have carried the baby
- Some hairs found on the jumpsuit were cat hairs

The prosecution addressed the jury on the basis that the claim that a dingo took the baby was "preposterous and not capable of belief". Whilst the claim that Azaria had been wearing a matinee jacket at the time of her disappearance, was, said the Crown, "a lie" by Mrs Chamberlain.

The Chamberlains were both convicted and Lindy Chamberlain was sentenced to life imprisonment.

Appeals by the Chamberlains were rejected unanimously by the Federal Court, and 3/2 by the High Court of Australia. In the background a small group of scientists formed the Chamberlain Innocence Committee.

Their work led to a number of findings including:

- The spray material beneath the dashboard of the car was sound deadening synthetic material and not blood at all. It was placed there during manufacture of the car
- The hairs found on the jumpsuit were canine or dingo hairs
- Dingo teeth could cause the sort of damage sustained by the jumpsuit

In November 1985 the Committee's application for a full judicial inquiry into the case was rejected by the NT government. So Lindy Chamberlain remained incarcerated.

In late January 1986, an English tourist, David Brett, fell to his death while climbing Uluru.

On  $2^{nd}$  February, during a search for his remains in an area containing a series of dingo lairs, the matinee jacket belonging to Azaria Chamberlain was found. (The existence of the jacket had been important for the defence to explain the lack of saliva and dog or dingo hairs on the jumpsuit).

Five days later, Lindy Chamberlain was released from prison and the NT government announced a Royal Commission of Inquiry into the Chamberlain Convictions. It was conducted by a Federal Court Judge, Justice Trevor Morling. It was comprehensive, and damning of the prosecution case. Amongst its findings were the following:

- 1. After microscopic examination of the spray alleged to have been foetal blood by a number of forensic pathologists and biologists, all agreed it did not look like blood in either the shape of the droplets or the pattern of the spray. Paint was present over (that is, on top of) the droplets.
- 2. The droplets were made of 'bitumenous sound deadener'
- 3. Negative testing before trial to the very sensitive 'ortho-tolodine test' for blood, had been overlooked
- 4. Original testing using anti-adult haemoglobin anti-serum was weak or negative. The anti foetal haemoglobin testing was claimed to be strongly positive. The reason for the difference was said to be slower denaturation of the HbF (foetal haemoglobin) molecule. Post trial testing showed that both denatured at much the same rate. Thus the claimed results were anomalous.

- 5. The result book for the testing showed 12 occasions where the results of testing on three samples from under the dashboard were crossed out or changed.
- 6. Proper controls were not used, which, if they had been, would have demonstrated the non specific nature of the apparent results
- 7. Negative and non specific test results on these samples were not mentioned in work notes produced for the trial, notes which were represented to be a complete record, and the negative and non specific results were not mentioned during oral evidence when there was an opportunity to do so.

Justice Morling concluded:

"For these reasons, I do not consider that the presence of baby's blood, or any blood, has been established upon the area under the dashboard... the strong probability is... that the spray pattern... was sound deadening compound, and contained no blood at all"

In his article Professor Cordner summarized a number of the Commission's findings:

".....there was no evidence that the scissors, found when the car was examined in September 1981, were in the car in August 1980, but that in any event, the material on the scissors produced weak ortho-tolidine reactions and non specific immune chemical reactions which did not allow the Commission to conclude that there was blood on them. Indeed, the Commission found that it could not conclude that there was baby's blood on any of the items for which this was contended at the trial. The forensic biologist relied upon at the trial lacked the experience necessary for the testing she reported on. For example, she failed to use adequate controls. In respect of a number of places in the car, "the evidence falls far short of proving that there was any blood in the car for which there was not an innocent explanation". There was no blood of foetal kind in the car. This meant that there was no factual basis to say that the blood in the tent had arrived there by transfer from Mrs Chamberlain who, it was alleged, had killed the baby in the car. Virtually all of the Prosecution's scientific evidence was found to be flawed. There was no handprint that any one other than Professor Cameron could see. The matinee jacket was a good reason why there may have been no saliva on the jumpsuit, as the defence contended at the trial."

The Royal Commission was highly critical of the scientific evidence at the trial. In the words of Justice Morling :

"The question may well be asked how it came about that the evidence at the trial differed in such important respects from the evidence before the Commission. I am unable to state with certainty why this was so. However, with the benefit of hindsight, it can be seen that some experts who gave evidence at the trial were over confident of their ability to form reliable opinions on matters that lay on the outer margins of their fields of expertise. Some of their opinions were based on unreliable or inadequate data. It was not until more research work had been done after the trial, that some of these opinions were found to be of doubtful validity or wrong. Other evidence was given at the trial by experts who did not have the experience, facilities, or resources, necessary to enable them to express reliable opinions on some of the novel and complex scientific issues which arose for consideration".

In his article Professor Cordner remarks: "Although expressed judiciously, this represents a serious and comprehensive rejection of the expert evidence given at the trial, evidence which led to the wrongful conviction of the Chamberlains".

On 12 June 2012, almost 32 years after her demise, the final inquest into the death of Azaria Chamberlain announced its finding that the cause of her death was as the result of being attacked and taken by a dingo.

As a postscript it may be noted that the Royal Commission dealt with the many rumours that had been circulated about the Chamberlains. Most, if not all of which, had received publicity in the media. In particular:

- That Mrs Chamberlain had ill treated Azaria
- That Azaria's name meant "sacrifice in the wilderness"
- That Mrs Chamberlain dressed Azaria in a sinister black dress
- That Mr Chamberlain kept a child's coffin at home for housing her body
- That Mrs Chamberlain did not properly feed Azaria shortly after her birth
- That the teachings of the Seventh Day Adventist Church countenance child sacrifice
- That the Chamberlain's family bible was found to be open at a passage where reference is made to a woman murdering her son

Justice Morling commented:

"It is sufficient to say that all the rumours, and many others, were found to be baseless. It would be inappropriate to dignify them by further discussion"

Lindy Chamberlain was undoubtedly demonized, and, in one sense, the jury gave the public the verdict that it had been brainwashed to desire.

The jury was aided and abetted in this task by the faulty expert evidence.

As we have seen, it is not only in other western common law countries that injustices can occur – wrongful convictions can and do occur in Australia. But, despite the litany of failures that I have mentioned the adversarial system overwhelmingly deliver just results.

Moreover, we are fortunate in Australia that a wrongful conviction for murder cannot result in State extermination.

Nonetheless, in an age where juries are undoubtedly influenced by the CSI effect, the need for reliable and independent expert evidence has never been greater.

It is not the purpose of this paper to discuss whether an organization to review criminal convictions is necessary in Australia. What is undoubtedly necessary is that the Courts are vigilant to ensure the competence of expert witnesses, and that their evidence does not extend beyond their areas of expertise.

Crusading zealotry, overweening arrogance, incompetence and bias are enemies of forensic medicine and the forensic sciences.

The aim of the expert witness should be to discover and reveal the truth of the matter under investigation – wherever that truth may lead.

It is for good reason that the motto of the Victorian Institute of Forensic Medicine is "Truth Conquers All"

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