

# Inquiry into the convictions of Kathleen Megan Folbigg OPENING

## The Petition

- 1. On 10 June 2015, pursuant to s. 76 of the *Crimes (Appeals and Review) Act 2001* ("the Act"), Kathleen Folbigg presented a petition to the Governor of NSW seeking an inquiry into her convictions.
- 2. On 22 August 2018, the Governor of NSW directed that an inquiry be conducted ("the direction")<sup>1</sup> into Ms Folbigg's convictions in respect of her children for the manslaughter of Caleb, the malicious infliction of grievous bodily harm upon Patrick, and the murder of Patrick, Sarah and Laura ("the Inquiry").
- 3. The direction records:

it appears that there is a doubt or question as to part of the evidence in the proceedings leading to the conviction of Kathleen Megan Folbigg... [which] concerns evidence as to the incidence of reported deaths of three or more infants in the same family attributed to unidentified natural causes.

- 4. On completing the Inquiry, the Judicial Officer is to cause a report on the results of the Inquiry to be sent to the Governor.
- 5. In addition, if the Judicial Officer is of the opinion that there is a reasonable doubt as to the guilt of Ms Folbigg, the Judicial Officer may refer the matter, with a copy of the report, to the Court of Criminal Appeal for consideration of whether the convictions should be quashed. It is for the Judicial Officer to form his own concluded opinion as to whether there is a reasonable doubt.
- 6. The Act does not require that the Judicial Officer be bound by the rules of evidence in conducting an Inquiry or in preparing his report. As such, in forming an

<sup>&</sup>lt;sup>1</sup> Governor of NSW, 'Direction pursuant to s. 77(1)(a) of the *Crimes (Appeal and Review) Act 2001*' (22 August 2018) – subsequently referred to as "the direction".

opinion as to the existence of a reasonable doubt, the Judicial Officer may have regard to all of the information and evidence received by the Inquiry. If there is a reference to the Court of Criminal Appeal by the Judicial Officer, that Court is also not bound by the rules as to admissibility of evidence, under s. 85(2) of the Act.

- 7. Your Honour has determined the scope of the Inquiry as follows:
  - Any new research or advances in medical science relevant to the causes of death of each child and the cause of the apparent or acute life threatening event in respect of Patrick.
  - Expert medical opinion as to the causes of death of each child and the cause of the apparent or acute life threatening event in respect of Patrick in light of any relevant new research or advances in medical science.
  - Any new research or literature concerning the incidence of reported deaths of three or more infants in the same family attributed to unidentified natural causes.
  - Any other related expert medical evidence.
  - Ms Folbigg is allowed to give evidence if she wishes to do so, about the diary entries, possession of the diaries and her disposal of the diaries. The evidence from her will be restricted and the crossexamination of her will be restricted to those particular issues.
- 8. At the fourth directions hearing on 11 February 2019 your Honour made the following additional order in respect of the scope of the Inquiry:

The scope of the Inquiry will not include the evidence of Ms Folbigg unless the Inquiry is notified in writing by 17 March 2019 that she does intend to give evidence.

9. The Inquiry has been notified in writing that Ms Folbigg intends to give evidence.

# The legal proceedings

- 10. On 19 April 2001 Kathleen Folbigg was arrested and charged with four counts of murder for the deaths of her four children, Caleb on 20 February 1989, Patrick on 13 February 1991, Sarah on 30 August 1993 and Laura on 1 March 1999.<sup>2</sup>
- 11. On 25 October 2002 the Crown presented an ex-officio indictment laying an additional charge of one count of maliciously inflicting grievously bodily harm with intent to do grievous bodily harm, in respect of Patrick's apparent life-threatening event ("ALTE") on 18 October 1990. Ms Folbigg was re-arraigned and entered pleas of not guilty to each count.<sup>3</sup>
- 12. The Crown case relied wholly on circumstantial evidence. It consisted of three categories of circumstantial evidence: evidence of the circumstances of each child's death and Patrick's ALTE; medical evidence from doctors and medical experts; and Ms Folbigg's diaries.
- 13. In his judgment as to the pre-trial application for separate trials brought by Ms Folbigg, and in the context of assessing the probative value of the medical evidence, Wood CJ at CL conveniently summarised the circumstantial evidence:<sup>4</sup>
  - a) The infrequent incidence of SIDS;
  - b) The rarity of repeat incidents of SIDS and of unexplained infant deaths or ALTE's within one family;
  - c) The absence of any metabolic abnormality in any of the children, let alone a common abnormality;
  - d) The fact that each was a healthy child and that such physical or medical conditions, as were observed post mortem, were unlikely causes of death;
  - e) The absence of any sleeping abnormality in the three children who were tested and/or monitored;

<sup>&</sup>lt;sup>2</sup> 1 May 2003 T1086.53-1087.30-33.

<sup>&</sup>lt;sup>3</sup> 25 October 2002 T1-2.

<sup>&</sup>lt;sup>4</sup> R v Folbigg [2002] NSWSC 1127 [107].

- f) The fact that monitoring was provided but then ceased in relation to Sarah and Laura a matter of some importance in view of the diary entry of 25 August 1997;
- g) The fact that two of the children were found by the mother within the very brief window between a child being found moribund and dead;
- h) The fact that all children were found by the mother while they were still warm, even though in four of the five relevant instances this occurred at night;
- The unexplained absence of Sarah and the mother at about 1 am, shortly before she was found dead;
- j) The unusual behaviour of the accused in getting up from bed, leaving the room, returning, and then getting up again only to discover, in the case of some of the children, that they were moribund or lifeless;
- k) The fact that she claimed to have observed, in the dark and from some distance away, that some of them were not breathing;
- I) The stress and anger which the mother had expressed toward the children;
- m) The fact that the mother would not nurse or endeavor to resuscitate the children when they were found.
- 14. The Crown case also comprised a fourth category of evidence described as "coincidence evidence". This referred to similarities in the evidence of the circumstances of each child's death and Patrick's ALTE relied on by the Crown to disprove, by way of coincidence reasoning permitted under s. 98 of the *Evidence Act 1995*, that the five events were merely coincidental.
- 15. In this regard, the Crown case relied on 10 particular features which were common across the five events, to disprove coincidence. Those features, as described during the closing address, were:<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> 13 May 2003 T1362-1364.

- All five events occurred suddenly: the events were over in a matter of minutes.
- All five events occurred unexpectedly: no child had any health problem that preceded the sudden deaths or ALTE or gave any sort of warning sign or previous symptom.
- All five events occurred at home, in circumstances where the children spent a proportion of their time away from the home.
- All five events occurred during the child's sleep period, rather than whilst playing at home, watching television, in the bath, or in the garden for example.
- All five events occurred when the child was in a bed, cot or a bassinet, rather than whilst asleep on the floor, or sitting, standing, running, jumping, skipping, eating or watching television.
- All five events occurred when the only person effectively at home or awake was Ms Folbigg, noting that Mr Folbigg was a deep sleeper, which gave her the opportunity to have done the children harm.
- Each child was discovered dead or moribund by Ms Folbigg.
- Each child was discovered by Ms Folbigg during what she claimed was a normal check on their well-being during the course of their sleep period, including on three occasions when she said she was on her way to the toilet.
- Each child was discovered dead or moribund at around or shortly after death when they were still warm to the touch, and two of them still had a heartbeat, so they were found literally minutes after the cessation of breathing.
- In relation to four of the five events, Ms Folbigg failed to render any
  assistance at all to the children after discovering them dead or
  moribund, to the extent that she did not even lift them up out of
  their beds.

- 16. It was the Crown case that these features were incapable of being explained except by the common feature of Ms Folbigg, because she was responsible for all the events.
- 17. The Crown case relied in this regard on evidence from doctors that:<sup>6</sup>
  - there [had] never been recorded a family such as this where four children died of natural causes, either from the same natural cause or from different natural causes, and
  - there [had] never been three or more deaths in one family recorded from SIDS.
- 18. It also relied on tendency evidence. The tendency particularised by the Crown was that Ms Folbigg had a tendency to: "become stressed and lose her temper and control with each of her four children, and then to asphyxiate them". <sup>7</sup>
- 19. On 29 November 2002 Wood CJ at CL had ruled evidence on each count in the Crown case admissible as coincidence evidence in relation to the other counts and dismissed Ms Folbigg's application for separate trials on that basis: *R v Folbigg* [2002] NSWSC 1127.
- 20. Ms Folbigg applied for leave to appeal against Wood CJ at CL's decision. On 13 February 2003 the Court dismissed the application for leave: *R v Folbigg* [2003] NSWCCA 17.8
- 21. At [32] Hodgson JA considered that he would find a deficiency of proof of guilt in relation to each count without the evidence concerning the other children, but that the additional evidence concerning the others would leave no rational view consistent with innocence. His Honour cited the same reasons as Wood CJ at CL for this view:
  - the extreme improbability of four such deaths and one ALTE occurring to children in the immediate care of their mother... without the mother having contributed; and
  - asphyxiation being a substantial possibility.

<sup>6 13</sup> May 2003 T1364 30-35

<sup>&</sup>lt;sup>7</sup> Crown notice of tendency evidence sent to applicant's solicitor, 24 October 2002, p.1.

<sup>&</sup>lt;sup>8</sup> Hodgson JA, [1]-[35], Sully and Buddin JJ agreeing, [36]-[37].

- 22. His Honour noted these matters were significant, particularly in light of the diary entries.
- 23. Ms Folbigg filed an unsuccessful application in the High Court for a stay of the trial pending hearing of an application for special leave to appeal against the decision of the Court of Criminal Appeal.
- 24. The trial commenced before Barr J and a jury of twelve on 1 April 2003.
- 25. The transcript of proceedings during both the pre-trial and trial stages reflects efforts at cooperation between the Crown and defence, to attempt to narrow the issues in dispute which required rulings from the trial Judge.
- 26. A number of evidentiary and procedural matters were dealt with during the course of the trial in the absence of the jury.
- 27. In particular, and of most relevance, the parties sought a series of rulings about the evidence of individual medical expert witnesses, concerning the admissibility of opinions expressed about the cause of death (and ALTE) in the individual cases, including opinions based on the fact and circumstances of the death (and ALTE) of the other children.
- 28. The effect of the rulings was that the experts:<sup>9</sup>
  - could give evidence about the possible or probable cause of death
    of each child and of the ALTE based on circumstances directly
    relevant to the event in question, namely the medical history of the
    child, the circumstances in which the child was found, the results of
    the post-mortem examination and the results of subsequent tests;
    and
  - could not give evidence about the possible or probable cause of death based on additionally the fact that each of the other children had died unexpectedly or that one had unexpectedly suffered an ALTE.
- 29. The rulings also determined that medical experts, with relevant practical and research experience, could give evidence of their knowledge of there not having

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<sup>&</sup>lt;sup>9</sup> Judgment on Crown application for exception to earlier ruling regarding Professor Byard, 7 May 2003, Barr J, [1].

been any case of three or more deaths attributed to SIDS within the same family reported in the literature, or encountered in the course of their own experience.

- 30. In one ruling concerning one expert's proposed evidence, His Honour observed that a statement that an unexplained death is more likely to be called a SIDS death if there is no prior unexplained death in the family, but less likely to properly be called a SIDS death if there is such a prior unexplained death, was not a statement of medical opinion. Although his Honour disallowed the Crown from adducing that evidence from the expert, his Honour noted it may nonetheless be a statement of common sense and it may be right.<sup>10</sup>
- 31. In summing up to the jury, the trial Judge noted the general medical opinion about which there seemed no dispute was that except where there are obvious (physical) signs of deliberate or accidental suffocation, "it is virtually impossible to distinguish between a death resulting from asphyxiation and a death resulting from natural but unidentified causes."
- 32. On 21 May 2003, Ms Folbigg was found guilty of three counts of murder in respect of Patrick, Sarah and Laura, one count of manslaughter in respect of Caleb and one count of maliciously inflicting grievous bodily harm in respect of Patrick.
- 33. After the trial, Ms Folbigg appealed against the convictions and sentence to the Court of Criminal Appeal.
- 34. Ms Folbigg's initial sentence was reduced on appeal to an effective sentence of 30 years' imprisonment with a non-parole period of 25 years. Ms Folbigg will be eligible for parole on 21 April 2028 and the balance will expire on 21 April 2033.
- 35. The grounds of the conviction appeal were:
  - Ground 1: the trial miscarried as a result of the five charges being heard jointly. (This therefore involved consideration of the admissibility of coincidence evidence);
  - Ground 2: the verdicts of guilty were unreasonable and could not be supported having regard to the evidence;

<sup>&</sup>lt;sup>10</sup> Judgment on admissibility of evidence of Dr Allan Cala, 16 April 2003, Barr J, [18].

<sup>&</sup>lt;sup>11</sup> 19 May 2003 T25-26.

- Ground 3: the trial miscarried as a result of evidence being led from prosecution experts to the effect that they were unaware of any previous case in medical history where three or more infants in one family died suddenly as a result of disease processes; and
- Ground 4: the trial Judge erred in his directions as to the use the jury could make of coincidence and tendency evidence.
- 36. The Court of Criminal Appeal rejected each ground of Ms Folbigg's appeal: *R v Folbigg* [2005] NSWCCA 23.
- 37. Ms Folbigg then filed an application for special leave in the High Court. That application was heard and refused on 2 September 2003 by McHugh ACJ, Kirby and Heydon JJ: *Folbigg v The Queen* [2005] HCATrans 657. Ms Folbigg raised two grounds, namely whether the tendency and coincidence reasoning was permissible and whether it was available to the prosecutor to lead evidence that three or more infant deaths in the one family from natural causes is without precedent (on the basis that such evidence reverses the onus of proof).
- 38. On 27 November 2007 the Court of Criminal Appeal heard a further appeal against conviction (*Folbigg v R* [2007] NSWCCA 128; *Folbigg v R* [2007] NSWCCA 371).
- 39. The grounds of appeal were that the trial miscarried because: 12
  - A juror or jurors obtained information from the internet which revealed that Ms Folbigg's father had killed her mother; and
  - A juror or jurors informed themselves away from the trial as to the length of time an infant's body is likely to remain warm to the touch after death.
- 40. The appeal was dismissed: *Folbigg v R* [2007] NSWCCA 371. McClellan CJ at CL (Simpson and Bell JJ agreeing) was satisfied that the irregularities were not material and did not give rise to a miscarriage of justice.<sup>13</sup> McClellan CJ at CL observed:

<sup>&</sup>lt;sup>12</sup> Folbigg v R [2007] NSWCCA 371, [4].

<sup>&</sup>lt;sup>13</sup> Folbigg v R [2007] NSWCCA 371, [60]-[62].

I have reviewed the whole of the evidence. I am satisfied this was an overwhelming Crown case. I am entirely satisfied that notwithstanding the irregularities no substantial miscarriage of justice has occurred.<sup>14</sup>

# Forensic pathology and SIDS evidence at the trial

- 41. Over 20 medical practitioners and experts gave evidence at the trial or produced reports concerning the matters the subject of the trial. Those witnesses of particular relevance to this Inquiry were:
- 42. Dr Allan Cala, a senior Staff Specialist Forensic Pathologist at Newcastle Department of Forensic Medicine, conducted the autopsy on Laura in March 1999. In 2003 he was a forensic pathologist at the NSW Institute of Forensic Medicine.
- 43. Professor John Hilton is a retired Consultant in Forensic Medicine. He conducted Sarah's autopsy in August 1993. Professor Hilton was Director of the NSW Institute of Forensic Medicine at Glebe from 1991 until 2001.
- 44. Experts who had not been clinically involved with the Folbigg children also gave evidence. Professor Roger Byard was a Specialist Forensic Pathologist at the Forensic Science Centre, Adelaide and Clinical Professor of Pathology and Paediatrics at the University of Adelaide. He was also Consultant Paediatric Forensic Pathologist to the Women's and Children's Hospital, Adelaide.
- 45. Professor Peter Berry was a consultant paediatric pathologist at the Bristol Royal Hospital for Sick Children since 1983 and was Professor of Paediatric Pathology at the University of Bristol since 1991.
- 46. Professor Peter Herdson was a consultant forensic pathologist with around 40 years' experience in pathology. He was Emeritus Professor of Pathology at the University of Auckland, New Zealand, Honorary Professor of Pathology at the University of Sydney and formerly the Director of Pathology at Canberra Hospital.
- 47. Dr Susan Beal was a paediatrician at the Children's Hospital in Adelaide with 35 years' experience. She had a particular expertise in epidemiology and SIDS research.

<sup>&</sup>lt;sup>14</sup> Folbigg v R [2007] NSWCCA 371, [64].

48. A key issue was whether the cause of death of each of the children should be attributed to SIDS or should be classified as "undetermined". At the time of the trial SIDS was defined as

the sudden death of an infant under one year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history. <sup>15</sup>

- 49. While slightly differing definitions were given by experts, the trial Judge referred to death from SIDS being from some unknown natural cause, whereas death from undetermined causes implies a death from some unknown natural or unnatural cause.
- 50. It was generally accepted by the witnesses that SIDS usually occurs during sleep and 90% of deaths occur in the first six months, peaking at two-four months. 16
- 51. There was evidence as to the environmental or risk factors thought to give rise to a SIDS death. The main risk factors were:
  - Prematurity
  - Low birth weight
  - Exposure to maternal smoke
  - Sleeping on one's stomach
  - Shared sleeping platforms
  - Being over bundled or overheated
  - Soft bedding
  - Covered faces
  - Age of mother

<sup>&</sup>lt;sup>15</sup> Marian Willinger, L Stanley James and Charlotte Catz, 'Defining the Sudden Infant Death Syndrome (SIDS): Deliberations of an Expert Panel Convened by the National Institute of Child Health and Human Development' (1991) 11(5) *Pediatric Pathology* 677.

<sup>&</sup>lt;sup>16</sup> See Rosemary S C Horne, 'Autonomic Cardiorespiratory Physiology and Arousal of the Fetus and Infant' in Jhodie R Duncan and Roger W Byard (eds), *SIDS: Sudden Infant and Early Childhood Death – The Past, the Present and the Future* (University of Adelaide Press, 2018) 449.

- Socio-economic circumstances
- Evidence of neglect
- 52. It was accepted by those who gave evidence as to environmental factors that none of the children possessed the most common risk factors.
- 53. Turning now to the deaths of each of the children.
- 54. Caleb died on 20 February 1989 when he was 19 days old. The autopsy report and death certificate gave the direct cause of death as SIDS. He had a diagnosis of a "floppy larynx" at the time of his death, meaning that the cartilage in the larynx was soft and could collapse on inspiration. The experts gave evidence that it was most unlikely that Caleb had died from a floppy larynx.
- 55. Most witnesses gave evidence that his death was consistent with deliberate suffocation (Dr Cala, Dr Beal, and Professors Herdson and Byard) while acknowledging that the findings were the same as or indistinguishable from SIDS.
- 56. Dr Beal opined that she would have diagnosed his death as SIDS with the proviso that he was under three weeks of age and found on his back. Professors Herdson and Byard would have said the cause of death was undetermined, while not excluding SIDS. For Professor Byard, that was based on Caleb having had a floppy larynx, there being no death scene investigation and that his brain was not examined.
- 57. Professor Berry gave evidence that the presence of haemosiderin, which is iron present in the lungs and signifies the presence of bleeding from the lungs, usually 24-48 hours before death, was very unusual in infant deaths and therefore he would call the death "unascertained". Professor Byard demurred and referred to literature that said haemosiderin was found in 20% of SIDS babies.
- 58. In relation to the question from the Crown whether Caleb had died from a catastrophic asphyxiating event Professor Berry said, "we all do because we all stop breathing."
- 59. Patrick had an acute life threatening event on 18 October 1990 when he was four months, 15 days old. It resulted in him having epileptic seizures and blindness. The evidence was that the event was unlikely to have been as a result of an epileptic seizure. It was described by one expert as "some catastrophic event that caused

- the lack of oxygen to the child's brain" and another as being most likely caused by an asphyxiating event of unknown causes.
- 60. Patrick died on 13 February 1991 at age eight months and 10 days. His death certificate recorded the cause of death as asphyxia due to airway obstruction (one hour) and epileptic fits (four months). The autopsy report recorded a diagnosis of encephalopathic disorder leading to intractable seizures, the underlying cause of which was not determined, and cardiac arrest at home. Encephalitis is an inflammation of the brain.
- 61. There was evidence at the trial about the role encephalitis played in his death, however, by the time of the trial the key experts discounted that as a reason. Most experts would have said his death was from undetermined causes because of the history of the ALTE and the fact that epilepsy or a seizure could not be excluded as a cause. No witness in evidence before the jury suggested that his cause of death should be attributed to SIDS.
- 62. Again there was evidence as to his death being consistent with suffocation and being a catastrophic asphyxiating event.
- 63. Sarah died on 30 August 1993, aged 10 months and 16 days. The autopsy report completed by Professor Hilton and the death certificate gave the direct cause of death as SIDS. On autopsy two tiny punctate abrasions were present near the lips. No photos were taken. Sarah was also found to have a reddened uvula.
- 64. Professors Byard and Berry gave evidence that they would have classified her death as SIDS, however there were some misgivings voiced because she was older than usual for that diagnosis and there was some evidence of a narrowing of the upper airway.
- 65. Dr Cala and Dr Beal would have found her death to be undetermined because of her age, and additionally for Dr Cala, because of the abrasions.
- 66. Laura was 18 months and 22 days old when she died on 1 March 1999. The autopsy report completed by Dr Cala gave the cause of death as "undetermined". Dr Cala said that she had myocarditis, an inflammation of the muscular walls of the heart, however this represented an incidental finding. He opined that Laura was too old for SIDS. Professor Herdson had a similar view about the myocarditis, believing it to be incidental, while Professor Byard could not exclude myocarditis and gave the cause of death as "undetermined". Others gave evidence that

- myocarditis could have led to or been the cause of her death (Professors Hilton and Berry). Others were less certain.
- 67. Again, there was evidence as to consistency with suffocation and a catastrophic asphyxiating event.
- 68. A number of experts had prepared reports or statements in which they gave their opinion considering the deaths of all four children and Patrick's ALTE together. None of those who were asked at trial said they had come across a family where there had been three or more children who had died from natural causes (Dr Beal and Professors Herdson, Berry and Byard).

## Sibling deaths

- 69. The doubt or question that gave rise to this Inquiry was in relation to that evidence as to the incidence of reported deaths of three or more infants in the same family attributed to unidentified natural causes.
- 70. That evidence gave rise to the submission to the jury by the Crown Prosecutor that "it has never been recorded that the same person has been hit by lightning four times" and "I can't disprove that one day some piglets might be born with wings and that they might fly. Is that a reasonable doubt?" 18
- 71. The trial Judge dealt with those submissions by directing the jury:

SIDS deaths are rare in the community. There is no authenticated record of three or more such deaths in a single family. This does not mean, of course, that such events are impossible. It is an illustration of the rarity of deaths diagnosed as SIDS.<sup>19</sup>

- 72. It is clear from the work of the Inquiry that before 2003 there had been reported cases involving the deaths of three or more infants in the same family attributed to unidentified natural causes, or at least not established as attributable to unnatural causes.
- 73. There is evidence, which has been tendered, as to the current state of knowledge concerning this issue.

<sup>&</sup>lt;sup>17</sup> 13 May 2003 T1364.43-44.

<sup>&</sup>lt;sup>18</sup> 13 May 2003 T1375.27-30.

<sup>&</sup>lt;sup>19</sup> 19 May 2003 T24-25.

- 74. In 2018, the publication which Professor Byard edited with Dr Jhodie Duncan, SIDS: Sudden Infant and Early Childhood Death The Past, the Present and the Future, was published.
- 75. The editors made the following observation:

The association of SIDS deaths amongst siblings is still debated. There have been reports of an increase in the incidence of SIDS of between two and ten times in infants who have had a sibling or twin death, including an increase [sic] risk based on the presence of SIDS in second- and thirddegree relatives. However, some of these outcomes have been explained once environmental and maternal factors have been controlled for and these families may only represent a small subgroup of individuals with increased vulnerability. There have also been reports of simultaneous sudden death in siblings supporting a genetic basis, although the importance of environmental factors should be taken into consideration under these circumstances. In addition, a report by Diamond et. al. indicated five consecutive sibling deaths in the same family, however, the authors feel that multiple deaths within the same family should raise concerns about other possible inherited conditions such as prolonged QT interval or metabolic disorders, homicide or potentially misclassified deaths of known cause. Thus, while multiple SIDS deaths in the one family may represent a genetic component in the etiology of SIDS, for 92% of families the risk of recurrence is considered small.<sup>20</sup>

# Diary entries

- 76. Entries in various diaries recorded by Ms Folbigg between 1989 and 1998 were one of the three categories of circumstantial evidence in the Crown case.
- 77. The diaries had been obtained by police during the course of their investigations.
- 78. The diaries obtained by police did not span the entire period between Caleb's birth in February 1989 and Laura's death in March 1999. The diaries which were relied on in the trial covered:

<sup>&</sup>lt;sup>20</sup> Jhodie R Duncan and Roger W Byard, 'Sudden Infant Death Syndrome: An Overview' in Jhodie R Duncan and Roger W Byard (eds), *SIDS: Sudden Infant and Early Childhood Death – The Past, the Present and the Future* (University of Adelaide Press, 2018) 15, 26 (citations omitted).

- February March 1989;<sup>21</sup>
- 1990;<sup>22</sup> and
- June 1996 April 1998.<sup>23</sup>
- 79. Bearing in mind that Caleb was born and died in February 1989, Patrick's ALTE was in October 1990 and he died in February 1991, Sarah died in August 1993, and Laura was born on 7 August 1997 and died on 1 March 1999, these are some of the diary entries referred to by various judges during the separate trials application<sup>24</sup> and the appeals.<sup>25</sup>

#### 3 June 1990:

This was the day that Patrick Allan David Folbigg was born. I had mixed feelings this day. Wether [sic] or not I was going to cope as a mother or wether [sic] I was going to get stressed out like I did last time. I often regret Caleb & Patrick, only because your life changes so much, and maybe I'm not a Person that likes change. But we will see?

## 16 May 1997:

.... Craig says he will stress & worry but he still seems to sleep okay every night & did with Sarah. I really needed him to wake that morning & take over from me. This time Ive [sic] already decided if ever feel that way again I'm going to wake him up.

#### 25 October 1997:

.... I cherish Laura more, I miss her [Sarah] yes but am not sad that Laura is here & 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 what is rong [sic] now instead of just snapping my cog. ... Wouldn't of [sic] handled another like Sarah. She's saved her life by being different.

<sup>&</sup>lt;sup>21</sup> Exhibit L, 1989 Diary of Kathleen Folbigg; Exhibit AK, Diary of Kathleen Folbigg.

<sup>&</sup>lt;sup>22</sup> Exhibit G, 1990 Diary of Kathleen Folbigg.

<sup>&</sup>lt;sup>23</sup> Exhibit J, Notebook Containing Diarised Entries of Kathleen Folbigg.

<sup>&</sup>lt;sup>24</sup> Per Wood CJ at CL: *R v Folbigg* [2002] NSWSC 1127, [11]-[15].

<sup>&</sup>lt;sup>25</sup> Per Sully J in the first appeal against conviction: *Folbigg v R* (2005) 152 A Crim R 35; *Folbigg v R* [2005] NSWCCA 23, [131]; McClellan CJ at CL in the further appeal against conviction: *Folbigg v R* [2007] NSWCCA 371, [39].

#### **3 November 1997:**

Lost it with her earlier. Left her crying in our bedroom – had to walk out – that feeling was happening. And I think it was because I had to clear my head & prioritise. As I've done in here now. I love her I really do I don't want anything to happen.

#### 9 November 1997:

... he [Craig] has a morbid fear about Laura. ... well I know theres 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.

#### 31 December 1997:

... [Laura's] a fairly good natured baby – Thank goodness, it has saved her from the fate of her siblings. I think she was warned.

## 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 & left her. I restrained enough to put her on the floor & walk away... I feel like the worst mother on this earth. Scared that she'll leave me know [sic]. Like Sarah did. I know I was short tempered & cruel sometimes to her & she left. With a bit of help. I don't want that to ever happen again. I actually seem to have a bond with Laura. It can't happen again. Im [sic] ashamed of myself. I can't tell Craig about it because he'll worry about leaving her with me. Only seems to happen if I'm too tired her moaning, bored, wingy sound, drives me up the wall...

- 80. As Sully J acknowledged when setting out these and other entries in his reasons for judgment on appeal, "there is a deal of this material, and it cannot be fairly compressed into a brief paraphrase." <sup>26</sup>
- 81. We note that Sully J went on to observe that the diary entries made "chilling reading" and had "damning" probative value, giving "terrible credibility and persuasion to the inference, suggested by the overwhelming weight of the

<sup>&</sup>lt;sup>26</sup> R v Folbigg [2005] NSWCCA 23, [131].

- medical evidence, that the five incidents had been anything but extraordinary coincidences unrelated to acts done by the appellant."<sup>27</sup>
- 82. In the course of the special leave hearing in the High Court, McHugh ACJ observed "the diary entries lend very cogent weight to what inferences can be drawn from the unexplained deaths" and queried why, "when the coincidence evidence is read in the light of those diary entries, was it not open to a court to think that the evidence was of significant probative value?"<sup>28</sup>

## Genetics related evidence available at the trial

- 83. Professor Bridget Wilcken, a clinical geneticist at the time of the trial, conducted particular genetic testing in respect of the four children and gave evidence at the trial in her capacity as the director of the NSW Newborn Screening Program and the NSW Biochemical Genetics Service.
- 84. She said the results from this testing, which concerned inheritable metabolic disorders, in respect of each child were "entirely normal". 29
- 85. Dr Jones was a consultant paediatric cardiologist engaged by the defence to opine in relation to Laura's death. He said "[t]here was no credible evidence for an inherited disorder of cardiac rhythm, such as long QT syndrome, in the Folbigg family."<sup>30</sup>
- 86. There was no evidence at the trial for an intrinsic congenital or acquired cardiac abnormality causing or contributing to the deaths of Caleb, Patrick and Sarah.

# Advances in Genomics and Genetic Testing Undertaken by the Inquiry

- 87. The Inquiry obtained a report from Dr Alison Colley, a clinical geneticist at the Newcastle and Northern NSW Genetics Service to whom Mr and Ms Folbigg were referred in 1991. Dr Colley is now the director of South West Sydney Local Health District Clinical Genetic Services.
- 88. Dr Colley identified there had been significant changes in genetic testing since the time of the trial.<sup>31</sup> She explained that the changes, particularly in the development

<sup>&</sup>lt;sup>27</sup> R v Folbigg [2005] NSWCCA 23, [132].

<sup>&</sup>lt;sup>28</sup> Transcript of Proceedings, *Folbigg v R* [2005] HCATrans 657, 65-80.

<sup>&</sup>lt;sup>29</sup> 16 April 2003 T819.51-820.14.

<sup>&</sup>lt;sup>30</sup> Statement of Dr Owen Jones (15 April 2003).

<sup>&</sup>lt;sup>31</sup> Report of Dr Alison Colley (26 November 2018) p 2.

of technology which enables sequencing of the whole genome and the whole exome of a person, have enabled hypothesis-free study of DNA. Now, a known or presumed diagnosis as a starting point is not needed. Rather the DNA sequences are studied and variants interrogated against the known human genome and the clinical features of a patient.

- 89. Genomic sequencing technologies emerged in 2009. Since 2013 two major genomics sequencing technologies have become mainstream.
- 90. Whole Exome Sequencing ("WES") sequences the exome, which is that small part of the genome (approximately 1-2% of the whole) that is involved in coding for proteins.<sup>32</sup> Proteins are the key components of cells and damage to them causes serious, if not catastrophic, problems. This part of the genome is the location of the majority of the mutations that cause developmental or cognitive disabilities and disorders.<sup>33</sup> Whole Genome Sequencing ("WGS") sequences all of the genome that is accessible. In addition to the exome, this comprises non-coding elements in the genome and mitochondrial DNA.<sup>34</sup>
- 91. Since the introduction of genomic sequencing, the pace at which the genes underlying genetic disorders are discovered per year has increased. The proportion of discoveries made by genomic approaches as compared with conventional approaches has steadily increased. Together WES and WGS have discovered nearly three times as many genes as conventional sequencing approaches that were available in the 1990s.

Engagement of expert advice on testing and consultation with the petitioner

92. In light of the significant advances relevant to the scope of the Inquiry, further investigations into genetic testing of the four deceased children and Kathleen Folbigg have been pursued by the Inquiry. For this purpose, the Inquiry has engaged genetic pathologist Dr Michael Buckley. Dr Buckley is the clinical director of the NSW Health South Eastern Area Laboratory Services ("SEALS") and current president of the Human Genetics Society of Australasia.

<sup>&</sup>lt;sup>32</sup> Report of Dr Alison Colley (26 November 2018) p 2.

<sup>&</sup>lt;sup>33</sup> John S Mattick et al, 'Whole Genome Sequencing Provides Better Diagnostic Yield and Future Value than WES' (2018) 209(5) *Medical Journal of Australia* 197.

<sup>&</sup>lt;sup>34</sup> Report of Dr Alison Colley (26 November 2018) p 2.

- 93. In addition to engaging Dr Buckley, the Inquiry has also engaged a multi-disciplinary panel of experts to interpret any sequencing data produced by the testing and provide additional comment on the testing process.
- 94. Ms Folbigg, through her legal representatives, has been afforded the opportunity for experts engaged on her behalf to be involved in the interpretation process.

# Available DNA samples

- 95. Material produced to the Inquiry by the NSW Department of Health in compliance with summonses issued by your Honour included samples of material containing DNA from each of the four children. These samples were taken either at birth as part of the Newborn Screening Program or following death as part of the autopsy procedures.
- 96. In December 2018 the Inquiry was informed that Ms Folbigg had provided to her legal representatives a swab sample for the purpose of genetic testing. Ms Folbigg consented to that sample being made available to the Inquiry for genetic testing.
- 97. Samples from each of the children and Ms Folbigg were submitted to laboratories for genetic sequencing in January 2019. Sequencing data was delivered to the Inquiry in February 2019 and is being analysed by the multi-disciplinary expert interpretation panel.
- 98. I will open further on those matters when the evidence relating to genetics is given in April.

# Forensic pathology and SIDS evidence before the Inquiry

- 99. Dr Cala and Professor Hilton will be giving evidence this week. As indicated earlier, Dr Cala performed the autopsy on Laura, observed by Professor Hilton, and Professor Hilton performed the autopsy on Sarah. Each gave evidence at the trial.
- 100. Professor Stephen Cordner who authored the forensic pathology report which accompanied Ms Folbigg's petition for this Inquiry will give evidence. He is Professor of Forensic Medicine at Monash University and has been the Director of the Victorian Institute of Forensic Medicine since 1987.
- 101. Professor Johan Duflou is a consultant forensic pathologist in private practice, part-time specialist forensic pathologist at the Forensic Medicine Centre in Canberra, Clinical Professor of Pathology at the University of Sydney and Conjoint

Associate Professor at the National Drug and Alcohol Research Centre, University of New South Wales. He is giving evidence at the request of Ms Folbigg's legal team.

- 102. Professor Dawn Elder is Deputy Dean, Consultant Paediatrician and Head of the Department of Paediatrics at the University of Otago, Wellington.
- 103. Professor Rosemary Horne is a Senior Research Fellow at the Ritchie Centre, at the Monash Institute of Medical Research, Monash University. Her PhD is from Monash University, in arousal responses from sleep as an underlying mechanism for SIDS Each of these Professors has been engaged by the Inquiry. Professor Elder will be giving evidence via audio visual link from New Zealand. Each will give evidence about developments in SIDS and SUDI, environmental risks and protective factors.
- 104. Professor Cecelia Caroline Blackwell is a con-joint Professor in Immunology ad Microbiology at the School of Heath, University of Newcastle. She has qualifications in Microbiology and a PhD in Medical Microbiology. She will give evidence as to advances in diagnosis and mechanisms associated with the pathology of sudden unexpected death in infants and children.
- 105. Professors Duflou, Horne, Blackwell and Elder had no involvement with the criminal proceedings.
- 106. There is general agreement between the experts that the current definition of SIDS has changed little since 2003 although there have been various sub categories added. There is better understanding of protective factors as well as more certainty as to the importance of particular risk factors, namely maternal smoking and sleeping arrangements.
- 107. In his 2015 statement, Professor Cordner has concluded that there is nothing from a forensic pathology viewpoint to suggest that any of the children had been killed, let alone smothered. He opined that there are identifiable natural causes of death for two of the children (Patrick and Laura) and natural causes are a plausible explanation for the other two deaths (Caleb and Sarah) and the acute or apparent life threatening event concerning Patrick.
- 108. Professor Duflou generally agrees with the conclusions reached by Professor Cordner.

- 109. At a general level, Professor Hilton has expressed that he is in "substantial agreement with the comments, views and opinions" of Professor Cordner, however, in essence and given trial process limitations, his views expressed in evidence remain the same.
- 110. It is expected that Dr Cala's evidence will be the same as his evidence at trial.
- 111. At the trial, an issue which remained in some dispute was whether Laura died from myocarditis or that her death was best classified as "undetermined" because of the presence of myocarditis and that she was the fourth child to have died.
- 112. In their statements to this Inquiry, Professor Cordner and Professor Duflou have referred to Dr Cala's finding of "undetermined" for Laura's death, and stated that this finding is acceptable and not unreasonable. Professor Hilton is expected to express the opinion that Laura died with, and highly probably because of, florid myocarditis. His evidence at trial was that myocarditis could possibly have led to her death.

Gail B Furness SC Ann Bonnor Sian McGee

18 March 2019