Report to the Inquiry into Pediatric Forensic Pathology in Ontario Comparative Experience with Pediatric Pathology and Miscarriages of Justice: South Australia

Dr. Robert N. Moles¹ and Ms Bibi M. Sangha²

The views expressed are those of the authors. They do not necessarily represent the views of their organizations or the views of the Commission or the Commissioner.³

1. INTRODUCTION

In 1994 and 1995, the Coroner in Adelaide, South Australia, held an inquest into the deaths of three babies who had died unexpectedly in separate incidents.⁴ The cause of death for each was given as bronchopneumonia; that is, natural causes. The inquest occurred because concerns had been raised independently about each case and because the investigators and doctors involved in the cases were aware of and concerned about injuries to each child that they thought may have been inconsistent with the autopsy results.

In each case the autopsy had been conducted by Dr. Colin Manock. The inquest was therefore effectively a review of his work. However, since he was the Senior Director of Forensic Pathology and responsible for forensic pathology in South Australia, and had

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¹ Dr. Robert N. Moles, ACII (UK) LLB (Hons) (Belf) PhD (Edin) Networked Knowledge, Adelaide, South Australia. See http://netk.net.au

² Ms Bibi M. Sangha, BA Law (Hons), LLM (Lond), Barrister-at-law (Lincoln's Inn), Barrister and Solicitor (SA and ACT, Australia), Advocate and Solicitor (Malaysia) Lecturer, Law School, Flinders University of South Australia.

⁴ Mr. Wayne Chivell, Coroner for South Australia, *Finding of Inquest into the Deaths of Storm Don Ernie Deane, William Anthony Barnard, Joshua Clive Nottle*, 25 August 1995.

been since 1968, the inquest could also be seen to be a review of the standard of work done in the forensic pathology department, at least with respect to pediatric cases.⁵ The Coroner's Finding was critical of the quality of the work done by Dr. Manock and the effect that this had had on the investigations in each of the cases. This paper considers the ramifications of the Finding and the systemic responses to it.

Our review of the three pediatric cases will be discussed in the context of some of Dr. Manock's general forensic pathology cases. It will examine how mistakes made by a forensic pathologist in cases of baby death may be instances of more general problems. It will demonstrate that faulty forensic pathology can give rise to false negatives (findings of accidental or natural causes of death where it may have arisen from culpable circumstances), and false positives (findings of culpable causes of death where it may have resulted from accidental or natural causes).

We will comment on the use of scientific principles that can be tested—as opposed to the "experience" of the pathologist, which is less amenable to testing and verification. We will identify systemic issues, such as the process through which Dr. Manock was qualified, and the indeterminate roles of the qualifying body—The Royal College of Pathologists of Australasia (RCPA)—the Medical Board, the Coroner, and the criminal justice system in the checks and balances, the supervision, and the overseeing of forensic pathologists. We will also examine questions of disclosure that may arise when a forensic pathologist provides expert testimony and in particular disclosure issues in relation to critical reviews of a pathologist's prior work.

⁵ Draft opinion of Dr. Mark Coleman to the Medical Board, 16 March 2005: "Dr Manock was not just a senior pathologist, he was the chief forensic pathologist for the State. He had the opportunity and indeed the responsibility, over many years to raise the standards, to introduce up-to-date systems, guidelines and protocols." Available at http://netk.net.au/MedicalBoard/Coleman16mar.asp

2. DR. MANOCK'S BACKGROUND AND TRAINING

In March 1968, Dr. Manock applied for the position of Director of Forensic Pathology in the Institute of Medical and Veterinary Science (IMVS), Adelaide.⁶ He enclosed a list of postgraduate positions he had held and of his experience of medico-legal work. This showed that he graduated from the Leeds Medical School with the degrees of MB, ChB (Bachelor of Medicine, Bachelor of Surgery) in 1962. Following that, he had several sixmonth placements: medical officer to a clinical toxicologist; medical officer to a cardiologist at St. James Hospital, Leeds; senior house officer to a group of neurosurgeons at Leeds General Infirmary; and senior house officer to a consultant obstetrician at Leeds Maternity Hospital.

He stated that in February 1964 he was appointed Assistant Lecturer in the Department of Forensic Medicine, Leeds University, and appointed as Lecturer to the permanent staff of the university in October 1966. He wrote that in the four years he had been in that department he had carried out 1,200 Coroner's post-mortems "of which 30 were murder cases for which [he] was personally responsible," 150 were suicides, and 90 were accidental deaths, including road traffic offences. He added that he had also attended the post-mortems of a further 30 murder cases.

At a Medical Board hearing in 2004, Dr. Manock said that he "was accepted by the Home Office as the Home Office Pathologist for at least two years of [his] tenure at Leeds University."⁷

In his application he noted his special interests as firearms and firearm injuries and stated that he was granted a firearms' dealer certificate in 1966. He listed the papers he had

⁶ Documents explaining Dr. Manock's background were lodged with the court in South Australia during legal action he took against his employer in the 1970s. As a result they have become part of the public record and the following information is taken from them. See: *CH Manock v State of South Australia and the Institute of Medical and Veterinary Science* SA Supreme Court, 2355 of 1978.

⁷ In the Medical Board of South Australia—Complaint by Mr Henry Keogh against Dr C Manock: November 2004, transcript p394. The Complaints by Mr. Keogh to the Medical Board can be found at http://netk.net.au/Reports/KeoghIndex.asp#medicalboard

given to the British Association of Forensic Medicine as "Peripheral Carbon Monoxide Due to Shotgun Injury" and "The Use of Papain for Extracting Bullets from Bone."

Dr. Manock was appointed Director of Forensic Pathology at the IMVS in Adelaide in December 1968 and placed on 12 months' probation. His appointment was confirmed in December 1969.

A few years later, Dr. Manock applied for Fellowship of the RCPA. His application showed that he had provisional medical registration in England and Wales from July 1962, full registration from July 1963, and British Commonwealth registration from 1970. He was granted a provisional certificate by the South Australian Medical Board from 2 December 1968. He obtained registration in the Northern Territory from February 1970 and a South Australian practicing certificate from September 1970.

Dr. Manock was admitted to Fellowship by the Council of the RCPA on 7 September 1971. Admission then was usually by way of a combination of written, practical, and oral examinations, depending on experience. Dr. Manock was given only an oral examination. Dr. David Weedon of the College told the following to reporter Sally Neighbour on an ABC TV program:

> Dr David Weedon: Well, it was the practice in those days for members who held very senior positions in Australia, and who had British qualifications, to be given a viva examination—that is, an oral examination only. Sally Neighbour: But Dr Manock didn't even have British qualifications. Dr David Weedon: So I believe. Sally Neighbour: So why would he have been given this oral-only examination? Dr David Weedon: Because of the seniority of the position he held. It

would probably have been about 20 minutes, and he would've been asked questions related to forensic pathology.⁸

No date of "completion of training" is stated on the College records, but there is a note saying that "Dr Manock had completed up to five years." The effect of granting Dr. Manock his Fellowship in the RCPA was to give him an important specialist qualification. It indicated that he was a person of high standing within the profession of pathology. But although he had spent some five years in forensic medicine in Leeds University, he had undertaken no formal accredited postgraduate training in pathology and had never sat a formal written or practical examination in the subject since his graduation as a doctor.

In the mid-1970s, an attempt was made by the IMVS to appoint a senior director of forensic pathology. Dr. Manock took action in the courts, arguing that this was tantamount to a constructive dismissal of him as *he* had been appointed as the head of the department.⁹ The IMVS responded by saying that his title as director was more of a courtesy title, and was not meant to convey that he was the department head. Dr. Bonnin, the Director of the IMVS, said during the court proceedings that the IMVS was in an awkward situation; they had a person (Dr. Manock) in a specialist's job, but without the necessary specialist qualifications. Dr. Bonnin said:

We had to make other arrangements for the work, particularly the histopathology which he was unable to do certifying the cause of death because of his lack in histopathology...¹⁰

⁸ ABC TV 4 Corners, "Expert Witness," 22 October 2001.

The transcript of this and the other programs referred to in this report are available from http://netk.net.au/Keogh/MediaList.asp

⁹ "Senior pathologist appeals over job,," *The Advertiser*, 23 March 1978.

¹⁰ CH Manock v State of South Australia and the Institute of Medical and Veterinary Science. SA Supreme Court, 2355 of 1978. Trial transcript, pp117–125.

The court upheld Dr. Manock's claim, and his position as the head of the department of forensic pathology was confirmed.¹¹ Dr. Manock was later to tell the Medical Board at a hearing in November 2004 that he was trained in the microscopic examination of post-mortem specimens by Professor Cyril Polson and David Gee (both of the University of Leeds). He admitted that he had never had training in "surgical" histopathology (that is, the microscopic examination of specimens) and said that if he had been so qualified he would in the 1970s have resigned as a forensic pathologist because he could have made much more money in private practice.¹²

Shortly after the court had decided his position as director, Dr. Manock was again back in court. He said that as he could be called out at any time, he was "on call" 24 hours per day, seven days a week, and hence was entitled to an allowance for this. The matter was settled.¹³

In 1981 the forensic pathology services in South Australia were transferred from the IMVS to the State Forensic Science Centre (SFS). This was a new organization set up by the government to provide forensic science and pathology services in the state.¹⁴ The move located the forensic pathologists in the same building (the Forensic Science Centre) as the Coroner's office and mortuary. The arrangement was that the SFS provided the pathology services for the mortuary. This meant that Dr. Manock, as Senior Director of Forensic Pathology at the SFS, was responsible for maintaining the autopsy service and standards. He reported to the Director of Forensic Science, Dr. W.J. Tilstone, a scientist.¹⁵ The effect of the move was to remove the forensic pathologists from a

¹¹ "Judge rules on status of forensic director," *The Advertiser*, 8 June 1979.

¹² In the Medical Board of South Australia—Complaint by Mr Henry Keogh against Dr C Manock: November 2004, transcript pp392–5.

¹³ "Forensic scientist claims 'on call' pay," *The Advertiser*, 28 September 1979.

¹⁴ Administratively, it is currently part of the Attorney-General's Department.

¹⁵ *In the Medical Board of South Australia*—Complaint by Mr Henry Keogh against Dr C Manock: November 2004, transcript pp408–9.

clinical-based environment and from day-to-day interaction with general pathology issues.¹⁶

In the ABC TV *4 Corners* program mentioned above, it was said that in 1994 the RCPA made Dr. Manock an examiner. Dr. Weedon was asked about Dr. Manock's continuing in 2001 to be a Fellow of the RCPA despite concerns having been raised in relation to some of his cases.¹⁷ He replied that the regulation of practice in Australia was the province of the medical boards, not the RCPA, and it would have been very difficult for the RCPA to withdraw a person's Fellowship without an adverse finding by a board. This raises the issue of the appropriate division of labour between medical boards, which have disciplinary jurisdiction over all doctors and specialized colleges that grant fellowships.

3. THE CORONER IN SOUTH AUSTRALIA

In South Australia, the State Coroner is a judicial officer and not a medical practitioner. To be appointed as a coroner a person must be a legal practitioner of at least five years standing and have been a stipendiary magistrate.¹⁸ As will be seen, a coroner in South

¹⁶ A number of reports on pathology services in South Australia had been completed in the 1970s and early 1980s and referred to this issue: for example, *Report of the Committee of Inquiry into the Institute of Medical and Veterinary Science* (The "Wells" Report) in December 1980 concluded that such a move would be detrimental; "5.7.2. ... the only way the specialist forensic pathologists can keep at the cutting edge of knowledge in forensic morbid anatomy and histopathology is through their continued involvement in non-forensic autopsies and histopathology where they are also subject to peer pressures and review." In the event in 1994 Dr. Oettle suggested a reversal of the situation that had by then developed. He said that at least with regard to the examination of pediatric deaths the forensic pathologists should be working with more general pediatric specialists at the Children's Hospital.

¹⁷ For discussion of other cases see section 9, "Other Relevant Cases in Which Dr. Manock Has Been Involved," below. For more details on these cases, see: R.N. Moles, *A State of Injustice* (South Melbourne, Australia: Lothian Books, 2004); R.N. Moles, *Losing Their Grip: The Case of Henry Keogh* (Adelaide, Australia: Elvis Press, 2006). Details are also available at http://netk.net.au/SouthAustraliaHome.asp

¹⁸ Coroners Act 2003 (South Australia).

Australia may obtain assistance from experts in pathology when evaluating the work of a pathologist.

The *Coroner's Act* imposes on the State Coroner the responsibility to oversee and coordinate coronial services in the state. The Act provides the coroner with the power to direct a medical practitioner who is a pathologist to perform a post-mortem examination of the body of a dead person and any subsequent examinations or tests that may be appropriate. The Coroner is authorized to appoint a general medical practitioner to undertake an autopsy in country areas. In Adelaide coronial post-mortems are generally performed at the State Forensic Science Centre by a forensic pathologist. The body of such a person is under the exclusive control of the State Coroner until an authorization for its disposal has been provided. The forensic pathologists in South Australia are alert to this and the extent of the control has been expressed as follows:

... in the event of a suspicious death the body remains under his control in terms of its being moved to the city mortuary and no pathologist is allowed to carry out a post-mortem examination unless the coroner has specifically nominated that person, when and where they can conduct that post-mortem examination. Every sample, be it blood or a piece of tissue or toxicology samples, or a brain for examination, or whatever, has to be approved by the state coroner. You're not allowed to do anything with any part of that body unless the coroner gives you permission to do so. That information, the pieces and fluids are collected, are all faxed immediately after the post-mortem to the coroner, so that he can rule on whether he gives his permission to do those tests or not.¹⁹

The Act also provides that a coroner must hold an inquest to ascertain the cause or circumstance of a reportable death (where the death is by unexpected, unnatural, unusual,

¹⁹ *In the Medical Board of South Australia*—Complaint by Mr Henry Keogh against Dr C Manock: November 2004, transcript p286; Evidence of Dr RA James.

violent causes, or of unknown cause). The proceedings are inquisitorial in nature. However if someone has been charged in criminal proceedings with causing the death, then the coronial inquest may not commence or continue until the criminal proceedings are completed.

In South Australia, the police "Crime Scene and Forensic Procedures Manual" is part of the "General Duties Manual," which in turn is part of the *General Orders*. The South Australian Police "Forensic Procedures Manual" states that it contains the minimum operating standards that crime scene examiners must follow when investigating physical evidence. It states specifically: "Initially (regardless of the probable category) crime scene investigators must *treat every death as a homicide* to ensure that no vital evidence is lost."²⁰

While a coroner may in the findings of an inquest ascertain the cause and circumstances of a death, in South Australia, the coroner is prevented from making any finding or suggestion attributing to anyone any criminal or civil liability.²¹ The situation is similar in New South Wales, but it is different in the state of Victoria where "a coroner must report to the Director of Public Prosecutions if the coroner believes that an indictable offence has been committed in connection with a death which the coroner investigated."²²

4. THE BABY DEATHS INQUEST 1994-95

4.1 Background

Between 1992 and 1993 Dr. Manock had completed autopsies in relation to three young babies. The babies concerned were:

Storm Don Ernie Deane—3 months—died on 16 October 1992 at Adelaide Children's Hospital;

William Anthony Barnard—9 months—died on 31 July 1993 at Adelaide Children's

²⁰ Emphasis in original.

²¹ *Coroners Act* 2003 (South Australia) s 25(3).

²² Coroners Act 1980 (New South Wales) s 22; Coroners Act 1985 (Victoria) s 21.

Hospital;

Joshua Clive Nottle—9 months—died on 17 August 1993 at Modbury Hospital, Adelaide.

As the result of his autopsy, Dr. Manock had in each case given the cause of death as bronchopneumonia, a basic lung infection. In each case the cause was associated with other features:

In Storm Deane's case, a congenital heart defect was also referred to; In Billy Barnard's case, there were said to have been bone fractures of the right arm; In Joshua Nottle's case, it was noted that there were also multiple rib fractures.

In each case the police and the doctors in the emergency departments involved thought that the cause of death given by Dr. Manock was not correct, and may have concealed serious child abuse—or even homicide. The police made their views known to the State Coroner, Mr. Wayne Chivell, who decided to hold an inquest into all three deaths in 1994. The Coroner commissioned Dr. Anthony [Tony] Thomas as an independent pathologist to review and assess the three autopsies Dr. Manock had conducted. Dr. Thomas was at the time a Senior Specialist in tissue pathology at the IMVS in Adelaide.²³ He had had forensic pathology experience in the United Kingdom and New Zealand as well as Australia. Dr. Thomas sent his report to the Coroner on 11 February 1994. Dr. Thomas's report comprised some 41 pages followed shortly after by a supplementary report of a further 5 pages. It set out the materials and records that were available to him at that time. It detailed the previous findings in relation to each of the three cases. It set out Dr. Thomas's criticisms of each case, his opinions, and the issues upon which *he* would have sought specialist advice from others. The inquest hearings were held between

²³ Dr. Thomas is currently a Senior Specialist in Anatomical Pathology, Flinders Medical Centre, and an Associate Professor of Pathology, Flinders University of South Australia. He has been Chief Examiner in Anatomical Pathology for the Royal College of Pathologists of Australasia. He is currently Chair of the Board of Censors of the College—the Board that has responsibility for examinations, assessments, and qualifications in pathology.

August 1994 and May 1995.²⁴ The Coroner released his findings in August 1995. As will be seen, the date of the publication of the Coronial Finding was to become an issue in a subsequent case involving Dr. Manock.²⁵

The following discussion is based on the Coroner's Finding, the transcript of evidence before the Coroner, the report of Dr. Thomas, Dr. Manock's autopsy reports in each of the three deaths, and the ABC TV *4 Corners* program, "Expert Witness," a national program that featured the baby deaths cases.²⁶

4.2 Storm Deane, age 3 months

Storm was born on 18 July 1992 to Craig and Heather. He lived with his parents and three siblings, who were 10, 6 and 4 years of age. Craig stayed at home to look after the children, and Heather worked as a telemarketer. Craig said that on Thursday 15 October 1992, while he and Heather were at home, he took Storm from the baby bouncer by grabbing hold of the front of his jumpsuit without supporting his head. Craig described taking him to the master bedroom: "I picked him up by the scruff of his clothes and carried him like a little carrying bag.... I flipped him, and he went about two feet forward and then landed on the bed."²⁷

²⁴ The hearings were held on 8, 9, and 25 August 1994; 22, 23, 24, 25, 28, 29 November 1994; 29, 30, 31 May 1995. The Finding was delivered on 25 August 1995. The hearings took place in public and were widely reported in the local print and electronic media. See also Annexure 1: Timeline of events.

²⁵ The case of Henry Keogh. See below at 8.1.

²⁶ Finding of inquest into the deaths of Storm Don Ernie Deane, William Anthony Barnard, Joshua Clive Nottle by the Coroner for South Australia, Mr Wayne Chivell, 25 August 1995.

Report of Dr AC Thomas on the Deaths of Storm Don Ernie Deane, William Anthony Barnard, Joshua Clive Nottle, 11 February 1994.

Autopsy Report on Storm Don Ernie Deane by Dr CH Manock, 27 October 1992. Autopsy Report on Joshua Clive Nottle by Dr CH Manock, 24 August 1993. Autopsy Report on William Anthony Barnard by Dr CH Manock, 15 September 1993. ABC TV *4 Corners*, "Expert Witness," 22 October 2001.

²⁷ Coroner's Finding, pp3 and 9.

Craig told the doctors at the time that he had flipped all his children in this manner, throwing them through the air onto the bed. He believed that this taught the babies how to fall properly and that it would be helpful to them in later life. In an effort to show them how to breathe from the diaphragm rather than from the chest, he had squeezed the baby around the chest on various occasions.²⁸

After putting Storm on the bed, he and Heather went outside to fix his Harley-Davidson motorbike. Heather later went to check on Storm and found him looking pale and not moving. Craig tried mouth-to-mouth resuscitation, but without success. Heather called an ambulance. When the ambulance arrived, Craig was said to have run out of the house with the baby and to have fallen over. However, it was said, that Storm did not hit the ground. The ambulance officers connected Storm to an electrocardiograph to measure his heart activity. They said that he was cold and grey, he had no heartbeat, and he was not breathing. He was rushed to the Lyell McEwin Hospital and then from there to the Adelaide Children's Hospital. The following morning it was agreed that Storm's life support would be terminated, and Storm was pronounced dead. One of the doctors reported that at the time the life support was terminated, Craig had placed his thumb on the baby's throat, saying that he did not like to see him gasping. The doctor said that while he was disturbed by this action it did not (in his view) contribute to the baby's death.

After having seen Craig's unusual behaviour, two doctors at the hospital expressed concerns about the circumstances of death and that Storm may have been the subject of non-accidental injuries. As a result of this, Dr. Byard, an expert on baby deaths and a consultant histopathologist at the hospital, arranged for X-rays and an external body examination.²⁹ This revealed that there was extensive bruising, a skull fracture and rib fractures, and an ulcer on the right buttock.

²⁸ Address by Mr Moss, Counsel Assisting the Coroner, transcript p979.

²⁹ "Histology" involves the microscopic study of tissues.

[&]quot;Histopathology" involves the study of minute changes in body tissues caused by disease.

Storm's body was then sent to the SFS for an autopsy. It was done by Dr. Manock without any other doctor present. He concluded that the cause of death was bronchopneumonia. He said that he was aware from the records that there was also a heart defect, but he did not undertake any microscopical examination of the heart tissues. He noted that there was a circular mark on the buttock, which was consistent with a burn. However, he said that it was probably a healing area of nappy rash. He also noted that there were bruises on the baby's back, which were consistent with finger pads. In his view, microscopical examination of the tissues confirmed the diagnosis of bronchopneumonia.

Dr. Manock reported that there were three bruises on Storm's scalp behind the left ear and that the brain was somewhat oedematous (swollen with fluid). A specialist in neuropathology subsequently examined the brain and noted that there may have been some damage to the brain stem. Dr. Manock stated that he found no fracture of the skull. He saw X-rays of multiple rib fractures and said that the history of the child's birth might help to explain some of them. He took the view that a hairline fracture of the eleventh rib may have been explained by the fall on the way to the ambulance. He said that some of the rib fractures might have been caused by "rough play," such as throwing the baby in the air and catching him again. A detective of the Criminal Investigation Branch (CIB) who attended the autopsy told the inquest that when he suggested that the fractures could not have come about in that way, Dr. Manock appeared irritated by him. He said that Dr. Manock's explanation for the injuries meant that there was no evidence to suggest that the death was caused by anything other than natural causes.³⁰

The detective had earlier carried out other investigations, interviewing Craig and a neighbour. Craig had suggested that he might have murdered his son at the hospital by strangling him. When the detective heard this, he arrested him. However, Craig was later released when the doctor said that his actions at the hospital would not have contributed

³⁰ Finding, pp8 and 27.

to the death. The detective said that he felt frustrated that the investigation couldn't go any further as a result of Dr. Manock's autopsy report.³¹

Dr. Terry Donald (a general practitioner who was the Director of Child Protection Services at the Adelaide Children's Hospital) told the inquest that the chest injuries looked as if an adult hand had been squeezing the chest. In his view, they resulted from "serious physical abuse" on at least two occasions before death.

Dr. Byard, who had wide experience of pediatric pathology, said that there should have been a detailed examination of the waterbed because of the possibility of accidental suffocation. He told the inquest that tissues from a number of areas of Storm's body should have been examined microscopically. These included: the buttock lesion, which Dr. Manock said he did examine and concluded from this that it was not a burn; the rib and skull fractures, which were not done; the brain, which was not done by Dr. Manock before he expressed his opinion but was later done by the neuropathologist; and the eyes, which were not done. When asked if, in hindsight, it would have been desirable to have examined the eyes, Dr. Manock said: "It would have been useful to have done it simply to answer the question now."³²

Dr. Thomas, in his report and in his evidence during the inquest, stated that there were many areas where microscopical examination and weighing of organs were not done. He said even the body itself had not been weighed or measured or at least not recorded. Some of these practices he described as "time honoured." He said that in his view it was clear that bronchopneumonia was not the cause of death and that the injuries were not related to birth trauma. In his view they were not accidental.

The Coroner said "it is extraordinary" that Dr. Manock did not conduct further enquiries to exclude the possibility of non-accidental injuries.³³ Dr. Manock's explanation, the

³¹ Ibid., p10.

³² Ibid., p25.

³³ Ibid., p25.

Coroner said, was that a pathologist should be careful not to influence the investigation and suggest suspicion that is unwarranted.³⁴ Dr. Manock was asked, "Did you have the opportunity to confer with police and give them a lot more in addition to your fairly bald report?" He replied, "I made the request that there be further consultations and I was surprised that that wasn't followed up."

As the Coroner stated in the Finding: "Detective Fielder was clearly outraged by that statement by Dr. Manock. He said:- 'I think it is disappointing that Dr. Manock would say or make those comments. I think it is foolish in the extreme to suggest that I would go to the length of the inquiry I did without consulting the man. I totally refute his claims."³⁵

The Coroner took the view that it was not possible to resolve the conflicting evidence with regard to the skull fracture. He rejected the cause of death as being bronchopneumonia and said that the cause of death would have to be recorded as "undetermined." It was his view that while a proper examination of the issues (by police, pathologists, and other medical officers) had not occurred, it was then too late to go back and look for evidence. It was almost three years between the time of Storm's autopsy and the release of the Coronial Finding.³⁶

4.3 William (Billy) Barnard, age 9 months

Billy was born on 29 October 1992 to Cherry and David. He lived with his parents and an older sister who was three years of age. Another sister had died when she had been only three weeks old. On the evening of Thursday, 30 July 1993, Cherry was in a sleeping bag with Billy. The following morning, she said, she found him not breathing. She called for an ambulance and the baby was taken to the Adelaide Children's Hospital. Billy was pronounced dead shortly after arrival. One ambulance officer said he had remembered

³⁴ Ibid., p26.

³⁵ Ibid., p26.

³⁶ See Annexure 1: Timeline of events.

attending at that address before when the other child had died. The ambulance officers noted that Cherry seemed "detached," "nonchalant," "unconcerned"—much the same as on the first occasion. The ambulance officer conveyed his misgivings to the medical authorities on arrival at the hospital. The physical examination of Billy by Dr. Donald (the Director of Child Protection Services) revealed injuries such as bruises and fractures that were possibly non-accidental, as well as scars that were unusual in a child that young. The body was sent to the SFS for an autopsy.

Again, Dr. Manock conducted the autopsy. Although there were two other pathologists on the staff at the time, as was established practice, no other pathologist was present.³⁷ His diagnosis was that Billy, too, had died of bronchopneumonia. He also had arm fractures. A detective from the CIB said that he couldn't undertake further inquiries because he was told that the cause of death was bronchopneumonia.

Cherry, when talking about Billy, admitted to having "cracked and snapped his arm." Billy's sister had also died while sleeping with her mother in a sleeping bag. The Coroner said that the Department of Family and Community Services had had extensive involvement with the family, and there was evidence of neglect and poor parenting skills. Cherry had had a disturbed childhood, as had David, who had served a sentence for assaulting a child in an earlier relationship.

It became clear during the inquest that Dr. Manock either had no notes or at least the notes that he had were inadequate. When asked, he said he could not recall why he did not weigh the lungs. He agreed that bronchopneumonia was unlikely to have been the cause of death, but was unable to recall what he had seen in the microscope slides that had led him to that conclusion.

He said he did not send the brain to brain specialist Dr. Blumbergs for examination because he was waiting for something from the detectives so that he could tell the specialist what to look for. The Coroner said that he was perplexed at this statement as in

³⁷ See interview with Paul Rofe QC, DPP, with Rohan Wenn, Channel 7, *Today Tonight* (Adelaide), 27 June 2002. Available at http://netk.net.au/Keogh/MediaList.asp

no other case had this presented a problem. He said that Dr. Manock conceded that he did not offer suggestions to the investigators about the cause or possible causes of the injuries:

> I am quite unable to accept Dr Manock's explanation as to why he did not offer this further information to the investigators immediately after the post-mortem examination concluded. It is spurious, in my opinion, to suggest that he did not offer these alternative explanations because he was waiting for further information to be supplied from the detectives. Unlike Dr Blumbergs, who did not need to be told what to look for, the detectives should have received all the assistance possible so that their investigations could focus on particular issues. With a diagnosis of bronchopneumonia, the investigation had no focus.³⁸

Dr. Thomas, in his evaluation of this case, said that there was no record of the weight of the body organs. He said that lung weights would have been invaluable. He said that there was no recorded temperature of the body, which again he described as a time-honoured practice. He said that there was no list (block-key) to identify the origin and exact location of tissues that had been taken for microscopic examination. The absence of this made interpretation of those tissue samples difficult.

The Coroner said in his conclusions that he had no hesitation in accepting Dr. Thomas's opinion that there was no evidence that Billy was suffering bronchopneumonia to any degree sufficient to cause death. He said that the lack of a thorough investigation was disturbing, particularly as this was the second such death in this family, and in strikingly similar circumstances. The Coroner said, "Dr Manock's conclusion basically caused the death to be written off as 'natural' and the investigation of the death was basically cut off before it began."³⁹

³⁸ Finding, p52.

³⁹ Ibid., p53.

4.4 Joshua Nottle, age 9 months

Joshua was born on 27 November 1992 to Julieanne and Sean. He had a brother who was then about two years old. On Tuesday morning, 17 August 1993, Joshua was found dead in his cot. He was taken to Modbury Hospital where he was declared dead. Bruising and rib fractures were noted. Two detectives from the CIB attended. After an interview, Sean was arrested and charged with Joshua's murder.

Joshua's body was transferred to the SFS where Dr. Manock conducted an autopsy the same day. (This was 17 days after he had done the autopsy on Barnard but he had not at that stage issued his written autopsy report on Barnard to the police.) Again, there was no other doctor present during the examination; the CIB officers, however, were present. Bruising was found in addition to a spine fracture and rib fractures. Again, the death was described as bronchopneumonia, this time associated with multiple rib fractures.

Knowing that there was evidence of spinal injury and multiple rib injuries, the detective investigating the case spoke to Dr. Manock about his concerns. He said that Dr. Manock explained to him that throwing the child into the air and catching him could have caused the rib injuries. Dr. Manock also said that the spinal injury might have resulted from "vigorous attempts at resuscitation" by the father. Dr. Thomas took the view that this was not correct. The Coroner said:

Dr Manock's evidence here reflects his apparent attitude that this is an issue of credibility, that it is his word against that of Dr Thomas, rather than an issue of scientific and professional method. Had Dr Manock done as Dr Thomas suggested he should have, this would not, and should not, have been an issue at all....⁴⁰

Once again, Dr. Manock had problems with his records. He said that the baby was weighed but that the weight had been misplaced.

⁴⁰ Ibid., p79.

Dr. Manock said that he had expected more information from the police. The Coroner, however, said that he was quite unable to understand how the police could be expected to provide that information without suggestions from Dr. Manock to help them.⁴¹

Unhappy with Dr. Manock's explanations, the detective saw the Director of Child Protection Services at the Children's Hospital (Dr. Donald), who disagreed with Dr. Manock's explanations. Dr. Donald said that the degree of force required to cause the type of injuries sustained by Joshua would be much greater than that proposed by Dr. Manock. Dr. Donald said that the spinal injury in Joshua's case was typical of those seen in young children who had been involved in high-speed car accidents, particularly when a child had been thrown from the vehicle. In the *4 Corners* program, he dismissed the suggestion that it could have been caused by "vigorous attempts at resuscitation." He also dismissed the idea that the rib injuries in this and the other cases could have been caused by "rough play."

After receiving Dr. Manock's autopsy report, the police asked Dr. Byard, the Senior Consultant Histopathologist at the Adelaide Children's Hospital, for an opinion as to the cause and circumstances of death. Dr. Byard advised the police that the rib fractures were most likely done by squeezing by an adult. He took the view that the spine fracture was most likely to be non-accidental and not as a result of resuscitation. He thought that the lung weights did not support the view of bronchopneumonia. He was "mystified" by Dr. Manock's suggestion of "bronchospasm." This is a contraction of the muscles of the airways—a physiological process that could not have been seen at autopsy.⁴²

Shaking babies can often cause brain damage. One of the classic signs of this is ruptured blood vessels in the eyes, which can be detected if the eyes are dissected at autopsy. The Coroner said it was as a result of Dr. Donald's suggestion, and not on his own initiative

⁴¹ Ibid., p77.

⁴² Ibid., pp71–2.

as Dr. Manock's report implies, that Dr. Manock agreed to dissect the eyes for possible signs of severe shaking.⁴³ No ruptured vessels were found.

As with the previous two cases, the report by Dr. Thomas was critical of Dr. Manock's autopsy. It showed that no body height or weights were given. There appeared to have been no microscopical examination of the bruises. Organs, other than the lungs, were not weighed. The rib fractures were noted, but not the fractures of the clavicles (collar bones), which were easily detected on the X-rays. Dr. Thomas took the view that a full skeletal survey would have been essential and that further dissection and microscopical examination would also have been essential. Further dissection and exploration of the spinal fracture would have been mandatory. Contrary to Dr. Manock's view, Dr. Thomas thought that bronchopneumonia was not the likely cause of death and that microscopical examination of the eyes should have been done and that the brain should also have been examined microscopically. He said that the "time-honoured practice of taking the temperature" was not done. Again, there was no list (block-key) in relation to the tissues that were taken for microscopic examination, making interpretation of those sections extremely difficult. Dr. Thomas agreed with Dr. Byard that bronchospasm cannot be detected at autopsy.

The detective investigating Joshua's case said that if he had had the information later available in Dr. Thomas's report, the subsequent investigation would have been a great deal different. The detective said that following an interview immediately after Joshua had died, Sean had been arrested and initially charged with murder. The detective said that when the results of Dr. Manock's autopsy became known to him, the charge was reduced to intentionally causing grievous bodily harm. The basis of this charge was that Julieanne had made allegations about Sean having physically abused the child. These charges too were later dropped.⁴⁴

⁴³ Ibid., p59.

⁴⁴ "Forensic expert under fire'," Sylvia Kriven, *The Advertiser*, 26 August 1995, p5.

She said that Sean would slap or hit the baby, but that she did not report this to the authorities because she was too scared. Sean denied the abuse; however, he could not explain what the Coroner called the "horrific injuries" to the baby, or the bite-mark on the baby's face.⁴⁵ The Coroner said that when Joshua had been previously admitted to hospital, one had to conclude either that the bruising was not noticed, or that the notes were not acted upon.

The Coroner agreed with Dr. Thomas that the autopsy had been inadequate.⁴⁶ He said that he had no hesitation in accepting Dr. Thomas's opinion that there was no evidence that Joshua was suffering from bronchopneumonia to any degree sufficient to cause death.

The Coroner concluded that, as in the matter of Barnard, he considered Dr. Manock's explanation that he was waiting for further information from the police to be "spurious." He said: "In my view, it was incumbent upon him [Dr. Manock] to provide the detectives with information so that they would know what to look for. The diagnosis of bronchopneumonia, together with the suggested explanation for the fractured spine, and the failure to explain the context in which the bruising and fractured ribs might have occurred, had the opposite effect.... The cause of his very serious physical injuries remains undetermined."⁴⁷ He said that the uncertainties surrounding the death were most disturbing, and although there were grounds for grave suspicion, nothing could be proved on the strength of the evidence as it stood. He recorded the cause of death as "not determined."

5. DR. MANOCK'S EFFECT ON THE INVESTIGATIONS

The Coroner stated in his Finding that he took the view that as Dr. Manock had been the head of forensic pathology in South Australia since 1968, his understanding of the criminal investigation process, and his obligation to liaise with and provide lines of

⁴⁷ Ibid., p82.

⁴⁵ Coroner's Finding, pp60–65.

⁴⁶ Ibid., p82.

inquiry to investigators, would have been second nature to him.⁴⁸ It was in that context that he made the following observations.

In the case of Storm Deane, the Coroner said that following the diagnosis by Dr. Manock of bronchopneumonia as cause of death, the detective had no information to suggest the death had been caused by anything other than natural causes and the investigation was no longer concerned with a possible homicide. He said:

The post-mortem examination achieved the *opposite* of what should have been its purpose—it *closed off* lines of investigation rather than opening them up.⁴⁹

In the case of Billy Barnard, the Coroner took the view that the "bronchopneumonia" explanation had caused the death to be "written off" as a "natural" death. He said that the investigation was basically cut off before it began. As in the previous case, he concluded that the autopsy in Billy's case achieved the opposite of its proper purpose—Dr. Manock's autopsy having closed off lines of investigation rather than opening them up.⁵⁰

The Coroner concluded that, of the three deaths, that of Joshua Nottle was the most serious as the non-accidental injuries were the most evident. He said that Dr. Manock's diagnosis prevented the establishment of a causative link between the non-accidental injuries and the death. He said:

> Accordingly, in my view what should have been a homicide investigation became the investigation of an admittedly serious assault. Dr Manock's investigation, and his subsequent report, provided innocent explanations for the most serious injuries found on Joshua's body, explanations that I am now satisfied were incorrect.

⁴⁸ Ibid., p21.

⁴⁹ Ibid., p27. Emphasis added.

⁵⁰ Ibid., p53.

In those circumstances, and in common with the other two cases, the post-mortem examination basically achieved the opposite of its proper purpose in that it closed off lines of investigation rather than opening them up.

... I consider Dr Manock's explanation that he was waiting for further information from the police to be spurious. In my view, it was incumbent upon him to provide the detectives with information so that they would know what to look for.⁵¹

The Coroner concluded:

People involved in child protection agencies, police and prosecuting authorities are placed in an invidious position when they are presented with evidence which is less than completely thorough and illuminating in such cases. The courts (whether it is a coronial or a criminal court) rely upon the validity and credibility of such evidence. The families of these poor children, whether guilty or not, are placed in an invidious position.

If guilt can be established, it should be established to the extent to which the system is capable. If innocent people are to be exculpated, then no questions should remain about the thoroughness of the investigation which might throw a doubt upon their innocence.⁵²

6. WHAT HAS BEEN THE RESPONSE?

6.1 The Coroner

The Coroner concluded that the issues arising from the inquest principally related to the role of forensic pathology in the investigation of suspected infanticide. He said:

⁵¹ Ibid., p82.

The evidence has satisfied me that the scientific investigation of suspected non-accidental injury of infants has developed considerably in the last decade or so, to the extent that it has become a recognised sub-speciality within pathology. I have formed the view that the study of patterns of injury in these circumstances is a complex and sophisticated area and one which should not be left to the generalist.⁵³

He referred to the submission made to him by Professor Stephen Cordner when he noted that the aims of the forensic autopsy were as follows:⁵⁴

To discover and record the pathological process present in the deceased;

To relate these processes to the known medical history, to make conclusions about the cause of symptoms and signs observed in life, and then to make conclusions about the medical cause of death and factors contributing to death;

To contribute to the reconstruction of the circumstances surrounding the death. Where these circumstances are likely to be important or likely to be in dispute, then this will require consideration of the scene of death as well as the relevant autopsy observations, many of which may be of trivial medical consequences;

To record all the relevant observations and negative findings in such a way as to put other pathologists in the same position as the pathologist performing the autopsy.

He then went on to say:

... I consider that the post-mortem examinations and reports prepared by Dr Manock in these three cases fell a long way short of achieving

⁵³ Finding, p84.

⁵⁴ Ibid., p86. Attributed by the Coroner to a paper presented in 1990 by Professor Stephen Cordner.

these aims, and I am very concerned that serious crimes may have gone unpunished as a result.⁵⁵

This comment by the Coroner, in relation to Dr. Manock, is that he (Dr. Manock) did not achieve the aims of autopsies *generally*. He was not referring specifically to the aims of pediatric autopsies. This means that Dr. Manock's failures in these three baby death cases are relevant to his autopsies in other non-pediatric cases. This issue will be discussed below in relation to the Henry Keogh case. This was a murder trial in 1995 that involved the death of an adult and also featured forensic pathology undertaken by Dr. Manock.

The Coroner discussed a number of submissions he had received and accepted, and pursuant to Section 25(2) of the *Coroner's Act* recommended that:

(1) To the extent that they have not already done so, pathologists in South Australia, and forensic pathologists in particular, should develop a series of protocols concerning autopsies which reflect the aims of the investigation being carried out, and which set out basic procedures which should be followed, to the extent that the pathologist should certify, at the completion of the investigation:that the aims have been achieved, or provide an explanation if they have

not;

that the basic procedure provided for has been followed;

(2) All autopsies performed on perinatal and paediatric deaths under coronial jurisdiction should be undertaken only by pathologists having specific training, substantial experience, and ongoing regular involvement in the performance of perinatal and paediatric autopsies, provided that where there is any indication at all of suspicious circumstances, collaboration between a forensic pathologist and a

⁵⁵ Ibid., p87.

perinatal/paediatric pathologist from the earliest stages of the investigation should occur.⁵⁶

The Coroner noted with approval that collaborative efforts between the forensic pathologists and pathologists from the Adelaide Women's and Children's Hospital had already commenced in relation to unexplained deaths of infants under the age of five years.

It is interesting to note the similarities between the paragraph (1) recommendations of the Coroner with respect to autopsy protocols for pathologists and the requirements recommended by the Splatt Royal Commission some 10 years earlier for the operations of forensic scientists.⁵⁷ The recommendations of the Splatt Commission and the lack of impact that the Commission had on the work of forensic pathologists will be examined below.

6.2 The media

During the baby deaths inquest the local print media published a number of reports of the evidence given. For example, in May 1995, *The Advertiser* reported on the ongoing Coronial Inquiry into the baby deaths. It said that there was a homicide theory in the deaths and that baby Joshua Nottle had a broken spine, broken collarbones, and 15 broken ribs when he died.⁵⁸ It was reported that Dr. Manock had said that the death had been caused by bronchopneumonia. In the following days, it was alleged that the baby.⁵⁹ Some articles specifically commented on the problems with the work of Dr. Manock.⁶⁰

⁵⁸ "Homicide theory in baby deaths," Sylvia Kriven, *The Advertiser*, 30 May 1995.

⁵⁶ Ibid., pp92–3.

⁵⁷ See section 7 of this paper, "What Standards Should Apply?" See also "Royal Commission Report concerning the conviction of Edward Charles Splatt," 1984, p51–2.

⁵⁹ "Baby may have been suffocated," Sylvia Kriven, *The Advertiser*, 31 May 1995. "Father may have hurt dead baby, inquest told," Sylvia Kriven, *The Advertiser*, 1 June 1995.

On 22 October 2001, the ABC, the Australian national broadcaster, aired as part of its *4 Corners* series the program "Expert Witness," referred to previously. This featured the baby deaths cases as well as some other cases in which Dr. Manock had been involved. In the program, the then Attorney-General, Trevor Griffin, reassured everyone:

... but what I do want to—to assert is that I've got an open mind on all of these matters. If the proper processes are followed, if the evidence which is provided, raises a significant doubt about the safety of a verdict, of course it will be looked at. And everyone who makes applications to me as Attorney-General can be assured that they will be properly looked at.

6.3 The Parliament

The *4 Corners* program created a minor flurry of activity on the topic at Parliament House, particularly in the Upper House (Legislative Chamber). On 31 October 2001, the Honourable Sandra Kank (Democrat) raised with the Minister for Health the matter of Dr. Manock and his performance, and the failure of the Medical Board to do something about it. On 4 December 2001, the Honourable Nick Xenophon, an Independent member of the Council, brought the following motion before the Parliament:

1. That this Council expresses its deep concern over the material presented and allegations contained in the ABC's Four Corners report entitled Expert Witness broadcast on 22 October 2001, involving Dr Colin Manock, forensic pathologist, and the evidence he gave from 1968-1995 in numerous criminal law cases;

2. Further, this Council calls on the Attorney-General to request an inquiry by independent senior counsel, or a retired Supreme Court

⁶⁰ "Some 'SIDS' babies suffocated court told," *The Advertiser*, 26 November 1994. "Baby death findings attacked again," *The Advertiser*, 30 November 1994.

judge, to report whether there are matters of substance raised by the Four Corners report that warrant further formal investigation; and

3. That the Attorney-General subsequently report, in an appropriate manner, to this Council on the allegations made in the Four Corners report and their impact on the administration of justice in this State.⁶¹

The Attorney-General (the Honourable Trevor Griffin, Liberal) addressed the motion on 14 November 2001. He said that he did not intend to establish an inquiry into the matters raised because the program did not accurately represent the facts. This was despite the fact that he had in 1999 admitted, in response to concerns put to him about Dr. Manock's performance in the Keogh case, that Dr. Manock had been the subject of criticism at "other inquests." He had added: "These inquests, however, bore no relevance to the evidence in the Keogh trial and the criticisms were specifically directed at paediatric issues."⁶²

On 28 November 2001, the Honourable Trevor Crothers (Labor opposition) spoke in support of the motion and was critical of Dr. Manock. The Honourable Terry Roberts (Labor) also supported the motion, and said that the opposition party had "some sympathy with the government's position that, if any or all of those accusations were found to have merit, the justice system that we have would be failing, particularly those infants and those who have possibly been wrongly charged."⁶³ But when Labor came to government shortly thereafter, the new Attorney-General's (Michael Atkinson's) "official reply" to the motion was just like that of his predecessor:

⁶¹ Hansard, Legislative Council of South Australia, 2001, p1709.

⁶² Letter of 24 May 1999 from the Hon. K.T. Griffin, Attorney-General, to Valerie Armfield, solicitor. See also, R.N. Moles, *A State of Injustice* (Lothian, 2004) and R.N. Moles, *Losing Their Grip: The Case of Henry Keogh* (Elvis Press, 2006).

⁶³ South Australian Legislative Council, 28 November 2001.

The Coroner, when inquiring into Dr Manock's findings in the three infant deaths, did not find Dr Manock incompetent to conduct adult autopsies.⁶⁴

That was not a question that the Coroner had to consider. Dr. Manock's work in the cases before him involved baby deaths.

While it is true that the Coroner only considered Dr. Manock's performance in relation to the three baby deaths, he found that the autopsies in those cases fell short of the aims for *all autopsies* as he had set them out in his Finding. The Coroner was clearly aware of the systemic implications of his Finding. He decided to withhold it until after the Keogh trial had been concluded, as will be discussed below.⁶⁵ The Keogh trial did not involve any pediatric issues.

6.4 The Director of Public Prosecutions (DPP)

The Director of Public Prosecutions in his response took a line similar to that of Mr. Griffin and Mr. Atkinson. When asked several years later in a television interview whether he was concerned about the criticisms of Dr. Manock raised in these baby deaths cases, the DPP, Paul Rofe, QC, said:

> I mean everything concerns me. But my understanding was that those mistakes, as the coroner subsequently found, were as the result of postmortems on babies and young children requiring a special skill which Dr Manock didn't possess and indeed didn't profess to possess.⁶⁶

⁶⁴ South Australian Legislative Council, 20 February 2003. Response of the Attorney-General conveyed by the Hon TG Roberts, MLC.

⁶⁵ See affidavit of Michael Sykes, solicitor, dated 7 November 1996; available at http://netk.net.au/Reports/Affidavits_List.asp

⁶⁶ Interview by Rohan Wenn, Channel 7, *Today Tonight* (Adelaide), 27 June 2002. Available at http://netk.net.au/Keogh/MediaList.asp

It is not correct to suggest that these are the sorts of mistakes that arose because the cases involved babies and young children. The Coroner had said that Dr. Manock had seen things that could not have been seen; that his replies to certain questions had been "spurious"; that Dr. Manock had not weighed organs or taken temperatures, which were "time-honoured" procedures; that Dr. Manock had not examined the hearts or brains properly, nor had he sent them to appropriate experts for examination as he should have done. None of that arose from any need to have specialist pediatric knowledge. They were simply the most basic procedures to be undertaken in *any* autopsy dealing with a suspicious and unexplained death. Indeed, the independent pathologist appointed by the Coroner (Dr. Thomas) was not a pediatric specialist.

It is however important to recognize that a coroner should not appoint a person to conduct a task requiring special skills when it is known that the person to be appointed does not have those special skills. Also, it is a part of the applicable Code of Ethics, that where a person is requested to undertake a task for which they are not properly or adequately trained, it is their responsibility not to undertake that task.⁶⁷

6.5 State Forensic Science

The Coroner recorded in his Finding the response of the SFS, Dr. Manock's employer. He said that he had been advised by Dr. W.J. Tilstone, the Director of Forensic Science in South Australia, that Dr. Godfrey Oettle, a senior pathologist from New South Wales, had been requested to review procedures and practices in the forensic pathology section of the SFS. He said the report had been made available to him and that it outlined all cases where the deceased was under the age of 15 years, and which had been the subject of an autopsy at the SFS over the five years to 1993. In all, 100 cases had been reviewed.⁶⁸

⁶⁷ The Australian and New Zealand Forensic Science Society Inc. Code of Ethics 1994: "Scientific Method

^{5.} Examinations should not be undertaken beyond the limits of one's expertise."

⁶⁸ The review took place between 17–22 April 1994.

The Coroner said that Dr. Oettle came to the general conclusion that the examinations carried out had been thorough and to the standard deemed acceptable by international standards, and that the reports were comprehensive and reflected internationally accepted forensic standards. Of this, however, the Coroner said:

... insofar as these comments relate to the three cases which have been the subject of this inquest, I respectfully disagree with them.

It is worth noting that, according to the case selection criteria, those three cases would have been included in the Oettle review.

The Coroner said that Dr. Oettle had noted that practices varied with relation to the inclusion in the reports of body measurements, organ weights, and microscopic findings, and had recommended that such findings should be in the final report in every case.

Although the Coroner did not remark on it, Dr. Oettle in fact went on to say that inclusion of this information in every case was required to make the reports comply with the acceptable international protocols. There is no mention in the Coroner's Finding as to whether any action was taken to ensure that the pathology reports would so comply.

The Coroner said he had accepted a recommendation, derived from Dr. Oettle's comments by Dr. Tilstone, and put to him on 8 August 1994 (which was the first hearing day of the inquest), as follows:

I therefore recommend to you that, in all cases of unexplained death in infants (children under the age of five years), you instruct the investigations be carried out by paediatric pathologists at the Adelaide Women's and Children's Hospital. The pathologists from State Forensic Science are available to you to assist the paediatric pathologists whenever appropriate, for example in trauma cases.

As mentioned previously (see 6.1), the Coroner noted that this now represented the normal procedure for such cases.

6.6 Dr. Manock

Dr. Manock retired as the Senior Director of Forensic Pathology at the State Forensic Science Centre on 4 August 1995, three weeks before the Coroner's Finding was released and just before Dr. Manock gave evidence at the second Keogh trial. Dr. Manock continued, however, to practise as a forensic pathology consultant until at least June 2004.

7. WHAT STANDARDS SHOULD APPLY?

In 1984 Professor W.J. Tilstone came to Adelaide as the Director of the Forensic Science Centre, the organization that employs the forensic pathologists in South Australia. He was in that position at the time of the baby death cases that involved Dr. Manock. He gave evidence relating to proper scientific procedures to the Canadian Kaufman Inquiry, which dealt with the conviction of Guy Paul Morin and which reported in March 1998. At a conference in 1986, Professor Tilstone had explained his view of proper procedures in forensic science and the following section is derived from that discussion.⁶⁹

Professor Tilstone defined "forensic science" as the application of scientific principles to provide information to assist in legal matters. "Analysis," he said, is the foundation of forensic science, but "evidence" is its purpose. The basic obligation of the forensic scientist is therefore to "gather evidence" of what has been observed. Having done that, it can then be used as the basis for any inferences that are to be made.

He described the various functions of evidence. He said it might be used to "indicate" some things or "eliminate" others. He noted the important role of scientific evidence in "corroborating" other forms of testimony. He illustrated aspects of this by discussing several cases that had occurred in the previous few years.

He referred in particular to the local South Australian case of Edward Splatt, whose conviction for murder in 1978 had been overturned in 1984 as the result of a Royal

⁶⁹ W.J. Tilstone, "Where Now for Forensic Science?" *Proceedings of The Australian Forensic Science Society*, Volume 4, Number 1 (April 1986), pp12–23.

Commission. He noted that the case was one in which forensic science had provided the evidence that led to the conviction. There was a wide range of material presented at the trial, and this was examined and re-examined by the Commission. The Commission was, he said, interested in the collection, selection, and examination of the material, the expression of opinion, the competence and credibility of witnesses, and evidence of a general nature that provided necessary or relevant groundwork for the tendering of scientific evidence.

In his report the Commissioner was critical of many aspects of how these tasks had been carried out and how the opinions were expressed, and went on to provide some guidance for the conduct of forensic science. Professor Tilstone pointed out that

... the Royal Commissioner underlined the vital obligation lying on the testifying scientist to spell out to the jury, in non-ambiguous and clearly precise terms, the degree of weight and substance and significance which ought properly to be attached to the scientific tests and analyses and examinations, to which he refers. The critical responsibility which rests with the legal persons is to ask such detailed and probing questions of the scientist as are most likely to elicit such evidence. In this context, *the primary responsibility must always remain with the scientist.*⁷⁰

Included in the Commission report, but not directly quoted by Professor Tilstone, were some significant procedures that the Commissioner described as the "very minimum requirements" in the operations of a forensic science laboratory. These were that every operation must be documented on the case notes and documented in such a manner that it would still be comprehensible years later, and that all major observations must be

⁷⁰ Emphasis added. See also *Royal Commission Report Concerning the Conviction of Edward Charles Splatt*, 1984, p52.

checked by an independent observer who must indicate that the proper checks have been made by initialing the notes.⁷¹

Professor Tilstone said that following the Royal Commission it was in his view vital that confidence in forensic science be restored to the legal, scientific, and lay communities and, in that process, "quality assurance is a major element."

The ramifications of the Splatt Royal Commission were that the procedures, methodology, and standards in the scientific laboratory areas of the SFS were modified and upgraded and the quality assurance programs enhanced. This culminated in 1990 in the accreditation of the laboratory by the American Society of Crime Laboratory Directors Laboratory Accreditation Board (ASCLD/LAB), the first laboratory outside the U.S.A. to achieve this. ASCLD/LAB did not cover pathology.

The Royal Commission did not involve itself in the pathology aspects of the Splatt case. It is apparent that its findings had little impact on the forensic pathologists in South Australia. The fact that Dr. Manock undertook the autopsies concerning the baby deaths on his own, the fact that his work at that time (1992–93) was not checked, and his failure properly to record weights and other critical information in those autopsies, demonstrate the point. Further, at a Medical Board hearing in 2004, the Board heard that there was no peer checking of the work of the forensic pathologists in 1994 and that "the only reason that peer checking is now conducted at the Forensic Science Centre is NATA [National Association of Testing Authorities] requires this for accreditation purposes."⁷² Dr. Manock told the Board that when he was the head of forensic pathology, if the pathologists had a difficult case they would discuss it, but they "didn't have weekly or monthly meetings or anything like that. It was done on a case-by-case needs-by basis."⁷³

⁷¹ Ibid., pp51–52.

⁷² In the Medical Board of South Australia—Complaint by Mr Henry Keogh against Dr C Manock: November 2004; affidavit of Dr RA James, 23 June 2004.

⁷³ *In the Medical Board of South Australia*—Complaint by Mr Henry Keogh against Dr C Manock: November 2004, transcript p409.

The situation now is apparently different. Autopsies, at least in cases of suspected homicide, are monitored, photographed, and occasionally videotaped. Other pathologists will, if available, view the proceedings. Before the report is sent to the Coroner there is a formal review process in place in which another pathologist reads the report and looks at the diagrams and photographs, and needs to be satisfied that he or she would form the same opinions and agree to the cause of death.⁷⁴

The Royal Commissioner's comments concerning "the critical responsibility which rests with the legal persons" should not be overlooked.

8. THE FAILURE OF SYSTEMIC RESPONSES

The baby deaths cases and the case of Henry Keogh are inextricably linked in forensic pathology in South Australia. The baby deaths cases provided examples of the work of a pathologist possibly resulting in serious crimes going unpunished.⁷⁵ The Keogh case illustrates perhaps the opposite scenario.⁷⁶

The principal connections between the Keogh case and the baby deaths cases are their timing and the involvement of Dr. Manock in both. Other links include similar criticisms by other pathologists of the autopsy, such as inappropriate approach, lack of thoroughness, insufficient organ weights, no block-keys, lack of proper photographs, poor understanding of bruises, failure to use scientifically sound procedures, and having only one pathologist.⁷⁷ Dr. Manock's conduct in the case is the subject of ongoing legal proceedings in South Australia.

⁷⁴ *R v Childs* (2006) SASC transcript pp1299–1300; evidence of Dr AD Cala.

⁷⁵ Coronial Finding p87.

⁷⁶ Submission in *Keogh v The Queen* High Court of Australia.

⁷⁷ See affidavits in relation to this case: Dr. Tony Thomas, Dr. Byron Collins, Professor Stephen Cordner, Professor Malcolm Fisher, and Professor Maciej Henneberg. Available at http://netk.net.au/Reports/Affidavits_List.asp

These include a Judicial Review by the Supreme Court of South Australia of a decision by the Medical Board of South Australia relating to a hearing by the Board in November 2004 into a complaint by Keogh concerning Dr. Manock's competence and professional behaviour.⁷⁸

Keogh has also applied to the High Court of Australia for special leave to appeal against his conviction, claiming that his conviction was obtained by "fraud and deceit" and "the withholding of relevant evidence and the provision of false and misleading evidence."⁷⁹ A brief discussion therefore of the Keogh case will serve to underline the ramifications of the failure to address the systemic problems touched on in the inquest of the baby deaths. The case also highlights problems experienced in the supervision of forensic pathologists.

8.1 The case of Henry Keogh, 1994

Background

Anna Jane Cheney was found dead in the bath at her home on the night of 18 March 1994.⁸⁰ She was found by her fiancé Henry Keogh. The police at the scene decided that there was nothing suspicious about the death. On Sunday 20 March 1994, Dr. Manock conducted the post-mortem examination for the Coroner. The Coroner had at that time received the report of Dr. Thomas (dated 11 February 1994) critical of Dr. Manock's autopsies in the baby deaths cases, but the inquest hearings had yet to commence. Also, Dr. Tilstone had requested Dr. Oettle to review procedures and practices relating to

⁷⁸ Keogh v The Medical Board of South Australia & Anor [2007] SASC 342—25
September 2007.

Available at http://netk.net.au/Keogh/Keogh13.asp:

28 September 2007 Application for Special Leave to the High Court—Respondent's Argument.

Available at http://netk.net.au/Keogh/DPP.pdf

⁷⁹ 4 September 2007 Application for Special Leave to the High Court—Applicant's Argument.

⁸⁰ See R.N. Moles, A State of Injustice, and R.N. Moles, Losing Their Grip: The Case of Henry Keogh.

pediatric autopsies between the years 1989 and 1993 in the forensic pathology section of the State Forensic Science Centre.

In the Cheney autopsy, Dr. Manock determined the cause of death to be freshwater drowning and decided that the drowning may have been deliberate. He told the committal proceedings that he "was at no time looking or thinking that the death was accidental because I could find no explanation as to why she would drown."⁸¹ Dr. Manock revisited the body the following day (Monday 21 March) and noticed what he described as some faint bruising on the lower left leg of the deceased. He was the only pathologist to examine the body of the deceased. His work was not checked at the time by anyone. The body was cremated on or about 30 March 1994.

Keogh was charged with the murder and tried twice (the first jury failing to agree on a verdict) in 1995. Both trials occurred during the period of the hearings in the baby deaths inquest. He was convicted of murder on 23 August 1995 and sentenced to a minimum of 25 years imprisonment. Two days later, the Coroner's report on the baby deaths was released.

Dr. Manock

In November 2004 Dr. Manock's opinion as to the cause of death was brought into question before the Medical Board of South Australia, following upon a Complaint by Keogh. At the Medical Board hearing, Mr. Borick, QC, asked Dr. Manock: "Do you agree with what I put to you, that it is the view of all of your professional colleagues over three decades that drowning is a diagnosis of exclusion? Do you agree with that proposition?"

Dr. Manock replied, "No, I don't."

He was then shown a list of major text books on pathology, published between 1955 and 2004, which described it as such.

Mr. Borick asked, "It covers the field doesn't it?"

Dr Manock: Yes, some of which I've made contribution to, as well.

Mr Borick: Which ones?

Dr Manock: Polson and Gee, their second edition; and I see that you don't have Polson and Tattersall's *Toxicology*, where I also made a contribution.

Mr Borick: In what year?

Dr Manock: That would have been in the mid-60s. [Dr. Manock completed his medical degree in 1962]

Mr Borick: Anything since then?

Dr Manock: No.

The following quotation from one of the texts was then put to Dr. Manock:

A diagnosis of drowning cannot be made without a complete autopsy and full toxicological screening, histologic analysis of all organs including the lungs and the diatom test. The diagnosis of drowning cannot be based solely on the circumstances of the death, non-specific anatomic findings and the results of the biological analysis.⁸²

He was then asked: "Your autopsy did not accord with that basic principle?" He replied, "No, it didn't."

At the second trial, Dr. Manock told the jury that the basis for his conclusion as to the cause of death was his observation of red haemolytic staining of the lining of the aorta with no such staining of the pulmonary artery. He said that these observations were "a classical sign of fresh water drowning."⁸³ At the Medical Board hearing in 2004, Dr. Manock said that his opinion was based on principles derived "from his experience," which had not been published. He said that at the time he gave his evidence to the jury, he knew that there was no reference in the recognized forensic pathology textbooks on

⁸³ *R v Keogh*, second trial transcript, p150.

⁸¹ Committal proceedings, *R v Keogh* (1994), transcript p26.

⁸² Jason Payne-James, Anthony Busuttil and William Smock, *Forensic Medicine*, *Clinical and Pathological Aspects* (Greenwich Medical Media, 2003).

the list given to him of books published over the last three decades of this differential staining phenomenon being diagnostic of drowning. He said that this was because "the rest of the world hadn't caught up."⁸⁴

The only way in which such a finding could be conclusive would be for it to have been validated by proper scientific studies and published in the literature. Dr. Manock agreed that differential staining is not referred to in the medical literature as a test for drowning. He had not carried out any properly validated scientific studies to determine how often it occurred in freshwater drowning; or whether it also occurred in non-drowning cases.

Mr Borick: Bearing in mind that the rest of the world differs from you on aortic staining, have you ever written anything on it?

Dr Manock: No, I haven't.

Mr Borick: Have you ever given the world the advantage of your skill?

Dr Manock: I have drawn people's attention to it, yes.

Mr Borick: Which people?

Dr Manock: People who have trained in forensic pathology at Divett Place. [The location of the Forensic Science Centre and mortuary in Adelaide]

Mr Borick: Outside Divett Place, have you ever drawn attention to anybody?

Dr Manock: I can't recall.⁸⁵

As the Appeal Court judges had said in relation to Dr. Alan Clift in the U.K., if his test had been such a wonderful test, "why didn't he publish it?" The accepted scientific view is that there are no signs that are pathognomic of drowning. It follows that Dr. Manock's finding about differential staining and drowning would have been the only positive sign which had been found to be specifically diagnostic of drowning. It would have been an important finding and surely worthy of publication. He did not at the time of the trial

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⁸⁴ In the Medical Board of South Australia—Complaint by Mr Henry Keogh against Dr C Manock: November 2004, transcript p339.

⁸⁵ Ibid., p340.

disclose to either the prosecution or the defence the lack of published scientific support for his diagnostic criteria.

There is no photographic record of the observations by Dr. Manock of "differential staining" at the autopsy. In fact, there are no autopsy photographs even identifying the deceased. The only photographs that have been made available from the autopsy are of the lower legs and of the top of the head with the scalp reflected. The photographs are black and white prints, a standard practice at the Adelaide mortuary at the time, according to Dr. Manock and others.

Dr. Manock formulated a scenario as to manner of death. It was based on the presence of what he said were four bruises on the lower left leg of the deceased, one of them being on the inner or medial side of the left calf, the other three being on the outer side of the leg. He said that the bruising was consistent with the leg having been gripped from behind by a right hand. The evidence of this "grip" enabled him to say that the deceased was killed by someone grabbing her left leg as she lay in the bath, forcing her legs back over her head and causing her head to go under water, thereby drowning her. The presence of a grip mark on the left leg was to become critical to the prosecution case, with the prosecutor telling the jury it was "the one positive indication of murder."

Although Dr. Manock demonstrated at the trial how the drowning might have been carried out using a right-hand grip from behind the left leg, he told the Medical Board hearing that he had always said the marks on the leg resulted from the grip of a *left* hand. He further said that the leg had been gripped from above by a left hand, or, alternatively, both hands had been used at different times.

This episode raises issues about the limits of the expertise of a forensic pathologist. To what extent, for example, should a forensic pathologist express opinions that may now be seen to be part of other specialities, such as anatomical issues and biomechanics. For example, note the following exchange:

Mr Borick: ... I am saying that by definition you're accepting that Prof Henneberg's field—forensic anatomy—is outside your field.

Dr Manock: No, its not.

Mr Borick: Nowhere are you trained in forensic anatomy, are you.

Dr Manock: Yes.

Mr Borick: When.

Dr Manock: Every time we go to a crime scene we have to associate the findings at the crime scene with the injuries to the body.

Mr Borick: Have you looked at Prof Henneberg's second affidavit, which details the training required to be an anatomist.

Dr Manock: What do you think an anatomical pathologist does?

Mr Borick: Dr Manock, your job as a forensic pathologist is to ascertain the cause of death.

Dr Manock: Yes.

Mr Borick: Right, and on this occasion you did an autopsy and you said cause of death was drowning.

Dr Manock: Yes.

Mr Borick: That's all you're required to do. You didn't have to go into all the anatomical exercise that you talked about. That's not your field of expertise at all. Dr Manock: Crime scene examination is part of my function, yes.⁸⁶

Another issue that arises here is where inconsistencies emerge between later testimony and earlier reports.⁸⁷ To what extent do the opinions being represented disclose an evolving view to accommodate evidential developments, or merely represent problematic and arbitrary adjustments? We will consider this further as part of our general conclusions.

Fundamental to establishing that there was a grip pattern was the mark on the medial side of the left leg. It was said to represent the position of a thumb. Dr. Manock told the jury that for histological examination he had taken sections from the bruises on the legs and

⁸⁶ Ibid., p 372–3. The affidavit of Professor Henneberg is available at: http://netk.net.au/Reports/Affidavits_List.asp

⁸⁷ See R.N. Moles, *Losing Their Grip: The Case of Henry Keogh* at p217.

that his microscopical examination showed that there was blood trapped in the tissue of the medial left leg section, which confirmed that the section was from a bruise.⁸⁸

At the Medical Board hearing, Dr. Manock admitted to the Board that the histology did not in fact support that the mark on the medial side of the left leg was a bruise and that he knew that from a few days after the autopsy in March 1994. The effect of this evidence is that there was no histological proof that the mark on the medial side of the left leg was a bruise and, further, there was no basis for what he told the jury as to the age of the bruise. Dr. Manock told the Medical Board that he did not disclose to the prosecutor the truth concerning the histology of this bruise because it "wasn't part of the conversation."

It is also known now that Dr. Manock did not check the full medical history of the deceased before forming his diagnosis. If he had done so he would have found that the deceased had had 37 medical consultations with 12 different medical practitioners over the previous five years. He took only limited tissue samples from the internal organs for histology.⁸⁹ He told the Medical Board that he had no record of the weights of the organs because his assistant had wiped them off the whiteboard during his absence from the mortuary to take a phone call.

Dr. James

Dr. Ross James, a long-time colleague of Dr. Manock at the SFS, was asked by the DPP before the trials to review the work of Dr. Manock. Dr. James told the Medical Board that he had supported Dr. Manock in his diagnosis of cause of death, but he had not disclosed at the trial that his opinion as to cause of death was based on his "personal observation" that he had "noticed differential staining in a number of cases."⁹⁰

⁸⁸ *R v Keogh*, second trial transcript, p189.

⁸⁹ The affidavits of the various medical expert witnesses who have provided evidence to the Medical Board in this case (including Dr. Tony Thomas) can be obtained from http://netk.net.au/Reports/Affidavits_List.asp

⁹⁰ Medical Board Transcript p287–290.

Dr. James also told the Medical Board that he did not disclose to the trial court his opinion that the mark on the medial side of the deceased's left leg was not a bruise because he "didn't think it was particularly relevant."⁹¹ He in fact told the Board that he thought his opinion differed from that of Dr. Manock.⁹² Apparently there is no record in Dr. Manock's case file of the result of his histological findings with regard to his analysis of the bruising. This should be contrasted with what Dr. Oettle stated in his report in relation to the baby deaths:

It is my opinion that body measurements, organ weights and microscopic findings should be included in the final report of every Coronial case, and this is in keeping with the acceptable international protocols.

⁹¹ Medical Board Transcript p305.

See also the UK Policy Advisory Board for Forensic Pathology—Dr AR Williams Reference 10th October 2003—Dr AR Williams MB ChB FRCPath—Judgment dated March 28 2006;

Available at http://netk.net.au/WilliamsHome.asp

The judgment included the following observations: (a) In the 1998 edition of Archbold Criminal Pleading, Evidence and Practice the existing law was summarised as following (with emphasis supplied): "Duty of Disclosure It is the duty of an expert instructed by the prosecution to act in the cause of justice R v Ward 96 Cr App R1 CA. It follows that if an expert has carried out a test which casts doubt on his opinion, or if such a test has been carried out in his laboratory and is known to him, he is under a duty to disclose this to the solicitor instructing him who has a duty to disclose it to the defence. This duty exists irrespective of any request by the defence. It is not confined to documentation on which the opinion or findings of the expert are based. It extends to anything which might arguably assist the defence. It is, therefore, wider in scope than the obligations imposed by the Crown Court (Advance Notice of Expert Evidence) Rules 1987 (SI 1987 No.716). Moreover, it is a positive duty which in the context of scientific evidence, obliges the prosecution to make full and proper inquiries from forensic scientists to ascertain whether there is discoverable material."

⁹² In the Medical Board of South Australia—Complaint by Mr Henry Keogh against Dr C Manock: November 2004; affidavit of Dr RA James, 23 June 2004.

Dr. James has himself been the subject of a Complaint to the Medical Board with regard to his conduct in the Keogh case.⁹³ Dr. James applied to the Supreme Court to stop the hearing, claiming witness immunity and an abuse of process. The Full Court held that witness immunity had no application to proceedings brought before the applicant's professional body and that the Medical Board was the appropriate place to determine any issue as to abuse of process.⁹⁴ The High Court refused Dr. James leave to appeal this decision.⁹⁵ The Medical Board hearing was eventually held on 16 August 2007 and the Board has reserved its decision.

Appeals

Keogh has over the years appealed his conviction to the South Australian Court of Criminal Appeal and to the High Court of Australia. All his appeals have been unsuccessful. He has petitioned the Governor three times.⁹⁶ On each occasion his application has been rejected. The now admitted instances of non-disclosure by Dr. Manock and Dr. James of significant evidence at the trial are the basis of Keogh's present application to the High Court that his conviction is a miscarriage of justice.⁹⁷

⁹³ The Complaint is available at http://netk.net.au/Reports/MBComplaint2.asp

⁹⁴ James v Medical Board of South Australia and Keogh [2006] SASC 267 (30 August 2006).

The various submissions and the judgment in the case are available at http://netk.net.au/KeoghHome.asp

⁹⁵ James v Medical Board of SA & Anor [2007] HCATrans 103 (2 March 2007). Submissions and other documents relating to this matter can be found at http://netk.net.au/KeoghHome.asp under the heading, "Witness Immunity and Abuse of Process."

⁹⁶ The petitions and the submissions to the Solicitor-General are available at http://netk.net.au/KeoghHome.asp

⁹⁷ Submissions and other documents relating to this matter are available at http://netk.net.au/KeoghHome.asp under the heading "Application to the High Court."

The baby deaths connection

(a) The Coroner

Two days after the verdict of guilty in the Keogh case the Coroner released his Finding on the baby deaths inquiry. According to the affidavit filed by Keogh's solicitor, the Coroner has said that he was sensitive to the fact that Keogh's trial was proceeding at the time when he was ready to publish his Finding. He has said that he knew that Dr. Manock was a principal Crown witness in the Keogh trial and to avoid a mistrial he had decided of his own volition to delay publishing the Finding on the baby deaths until after the Keogh trial had concluded.⁹⁸

(b) The Prosecutor

An interesting aspect of the media coverage was the extent to which the newspapers at the time of the Keogh murder trials revealed how much they overlapped with the Coroner's hearing of the baby deaths inquiry. Dr. Manock's procedures and expertise had been called into question in that inquiry. His diagnosis of the cause of death in those cases had been vigorously challenged. The extensive reporting of these matters meant that many people in Adelaide would have been aware of the close scrutiny being given to Dr. Manock's skill and competence at the baby deaths inquiry. Yet none of this was raised by either the prosecution or the defence counsel at the Keogh trials.⁹⁹

⁹⁸ Affidavit of Michael Jerome Sykes, 17 December 1996, available at http://netk.net.au/Reports/Affidavits_List.asp, filed in *Keogh v DPP* SASC.

⁹⁹ In *Cooley v The State of Western Australia* [2005] WASCA 160, a doctor had been called by the prosecution to give evidence at a criminal trial. The Medical Board had made adverse findings on his credit some five months before the trial, but five months after the trial his credit was restored. The Court held that the Medical Board's adverse findings against the doctor should have been disclosed at the trial. Roberts-Smith J.A. concluded that "it is not enough for the prosecution to say simply that the information was in the public domain, or that the applicant should have made inquires which would have revealed it. The defence was entitled to assume that a professional expert witness called by the State was a witness of integrity and credibility and that if there was any material showing otherwise, the State would disclose it. The failure of the State to do so deprived the applicant of the opportunity to cross-examine Dr Srna on an issue which

The first real public discussion of disquiet about the connection between the baby deaths and the *Keogh* case did not appear in the media until October 2001, when the ABC broadcast their *4 Corners*, "Expert Witness," program. Mr. Rofe, QC, told the program that he accepted that Dr. Manock had been severely criticised by the Coroner. When asked whether he had any misgivings about putting him up as an eminent witness, he replied:

No, he's a man of 33 years experience, 9,000 or 10,000 post-mortems. And, you know, he got one wrong, certainly.

When asked later by the Channel 7 *Today Tonight* current affairs program in Adelaide, which had since taken up the issue, if he was still confident to use Dr. Manock as an expert witness, Mr. Rofe replied: "Yes. He had vast experience." He then conceded that it was "possibly true" that just because one does a job frequently doesn't mean one does it well.¹⁰⁰

8.2 Who is in charge: The College (RCPA) or the Medical Board?

As noted above, the RCPA has claimed that they are restricted in their role of overseeing the qualification and performance of forensic pathologists. The regulation of the practice

bore directly on his credibility, in circumstances in which the jury's assessment of that may have led to a different verdict. There was accordingly a miscarriage of justice." Ibid. at para 67. The Court rightly stressed that the issue was not whether the material relating to the credibility of the doctor was in the public domain but "whether or not what occurred has resulted in a miscarriage of justice." Ibid. at para 53. Judgment available at http://netk.net.au/Australia/Cooley.asp

In *Cooley* it was said that if material was available to the Crown, on the basis that it was known to the police, for example, then Cooley was entitled to it, *whether or not its existence was known to prosecuting counsel*. In such a case, it is not necessary for the appellate court to determine whether there was any *fault* on the part of the prosecutor in this respect. Innocent failure to disclose relevant material may nonetheless constitute a miscarriage of justice. In some of the cases it is said that the prosecution includes the police and "any others who are of assistance to the prosecution," and this would, of course, include expert witnesses.

¹⁰⁰ Interview by Rohan Wenn, Channel 7, *Today Tonight* (Adelaide), 27 June 2002. Transcript available at http://netk.net.au/Keogh/MediaList.asp

of medicine in Australia lies with the Medical Boards in the various states. According to the spokesperson, the College can act with respect to a person's Fellowship only if there has been an adverse finding by a Medical Board.¹⁰¹ The *Keogh* case illustrates the dilemmas with this arrangement.

The procedures and powers of the Medical Board of South Australia were set out in the *Medical Practitioners Act* 1983.¹⁰² It said that the Medical Board responsibilities were (1) to ensure that the community is adequately provided with medical services of the highest standard, and (2) to achieve and maintain the highest professional standards both of competence and conduct in the practice of medicine.

Keogh's Complaint to the Medical Board was that Dr. Manock's conduct in relation to the practice of medicine had been at relevant times: (a) Improper and/or unethical; (b) Incompetent and/or negligent within the definition of "unprofessional conduct" contained in the Act.¹⁰³ The Act provided that a complaint with regard to unprofessional conduct may be put before the Board by the Registrar of the Board, or by "a person aggrieved" by the conduct of the medical practitioner. When it receives a complaint, the Board must do one of three things: it may *reject* the complaint if it considers it to be vexatious or frivolous; it may *refer* the complaint directly to the Medical Tribunal for it to be dealt with there; otherwise, it *must inquire* into the complaint and make a determination.

Keogh first approached the Medical Board of South Australia in September 2001. He laid his complaint as a person aggrieved. He asked that the Complaint be laid before the

¹⁰³ The various submissions and decisions of the Medical Board, including preliminary drafts of decisions can be obtained from http://netk.net.au/Reports/KeoghIndex.asp#MedicalBoard

¹⁰¹ See section 2 of this paper, "Dr. Manock's Background and Training." See also ABC TV 4 Corners, "Expert Witness," program, 22 October 2001. Transcript available at http://netk.net.au/Keogh/MediaList.asp

 $^{^{102}}$ Although the legislation has changed since then, we refer to the provisions in force at that time. The current provision is the *Medical Practice Act* 2004 (SA).

Tribunal, "it being a matter of sufficient seriousness and involving significant issues of public interest such as to warrant it being referred to the Tribunal." That was not done.

The Medical Board said that it was not appropriate for them to look into any of the other cases in which Dr. Manock had been involved. However, it later referred in its judgment to the fact that it is difficult to arrive at a finding of unprofessional conduct by examining just one case. The Registrar said that he did not support Keogh's complaints; that it might be unfair to Dr. Manock to have to defend himself against serious allegations some years after the actions in question; that there had been undue delay in raising these matters with the Board. Keogh's position was that if there had been any delay, then as the Registrar had the power to initiate a complaint, and all of the other cases that Keogh had complained about were on the public record, then the Registrar could have initiated any complaint to the Board.

At a hearing in December 2003, Dr. Manock's lawyer claimed that the Complaint by Keogh was either frivolous and/or vexatious or, alternatively, it was being pursued for an improper purpose, being to overturn his criminal conviction. Mr. Borick, QC for Keogh, submitted that was clearly wrong. The only issue before the Board was whether Dr. Manock was guilty of unprofessional conduct in relation to the practice of medicine as defined by the Act.

In July 2004 Mr. Borick explained to the Board that the Act said that the Board can appoint an investigator; demand the production of books and materials; and require people to answer their questions. The Board stated however that because the Registrar had not approved of Keogh's complaint, then Keogh would have to investigate his own complaint and then "prosecute" the matter before the Board.

The formal hearing by the Medical Board eventually took place in November 2004, with only two days being allowed for cross-examination of witnesses and the evidence in chief being taken by way of affidavit. They published their reasons for decision in June 2005. They determined: "The Board cannot say that the way in which Dr. Manock conducted the autopsy and in which he arrived at the murder hypothesis constituted a departure from the observed or approved professional standards to a substantial degree."¹⁰⁴ They concluded, therefore, that unprofessional conduct on the part of Dr. Manock had not been established.

As noted above, Keogh sought Judicial Review of the Medical Board decision in the Supreme Court. As part of the process of discovery it was revealed that before the final decision of the Medical Board was released, three of the panel of five had individually written draft opinions indicating that in their view Dr. Manock's conduct of the autopsy in the Keogh case was unsatisfactory and fell below the standards required.¹⁰⁵

The decision of the Supreme Court in this matter was delivered on 25 September 2007.¹⁰⁶ The determination of the Chief Justice was that the Medical Board had asked themselves the wrong question and their decision had to be set aside. The Chief Justice concluded that the Board had applied the wrong test of "unprofessional conduct." He said it was an inappropriate test and too narrow a one. It was his view that in acting as they did the Board had failed to have regard to the statutory language that defined "unprofessional conduct."

He pointed out that in the relevant Act, unprofessional conduct is defined as: (a) improper or unethical conduct in relation to the practice of medicine; and (b) incompetence or negligence in relation to the practice of medicine.¹⁰⁷

¹⁰⁴ Medical Board decision 22 June 2005 available at http://netk.net.au/SouthAustraliaHome.asp

¹⁰⁵ Keogh v Medical Board of South Australia & Anor [2006] SASC 285. Available at http://netk.net.au/KeoghHome.asp The draft reports of the members of the Medical Board are available at http://netk.net.au/Reports/KeoghIndex.asp#MedicalBoard

¹⁰⁶ *Keogh v The Medical Board of South Australia & Anor* [2007] SASC 342. Available at http://netk.net.au/KeoghHome.asp

¹⁰⁷ The *Medical Practitioners Act* 1983 (SA), now superceded by the *Medical Practice Act* 2004 (SA). The Complaint was determined in accordance with the provision of the 1983 Act.

However, instead of applying that test, the Medical Board had applied a test laid down in *In re R, A Practitioner of the Supreme Court* [1927] SASR 58, which referred to conduct which fell short to a substantial degree of the standard of conduct observed or approved by members of the profession of good repute and competency. As the Chief Justice pointed out, that test was only applicable prior to the development of a statutory standard.

The Chief Justice said the Board's approach then led it into a further error. It had gone on to consider whether Dr. Manock had acted in accordance with prevailing standards. The Board had asserted that in 1994 there were no established national standards for best practice in forensic pathology.¹⁰⁸ That had then led the Board to say that they saw no reason as to why they should not rely upon the "usual practices" at the Forensic Science Centre in 1994, in particular as evidenced by Dr. James who was Dr. Manock's subordinate at the time. As the Chief Justice said, "The Board had reasoned to a position in which standards that one would expect to be influenced by Dr. Manock's own practices became the benchmark against which his conduct was to be measured in this particular case."

To ask whether Dr. Manock observed the "usual practices" at the Forensic Science Centre, in forensic pathology, when he was the head of forensic pathology there, seems to resolve into the question as to whether Dr. Manock did "what he *usually* did," which is obviously not an appropriate standard by which to ensure that the community is provided with "medical services of the highest standard" or of "achieving and maintaining the highest professional standards of competence and conduct in the practice of medicine."

The Chief Justice then determined that there was a further error in the reasoning of the Board. The Board had said that the issues involved in Dr. Manock's theory had been "subjected to the full scrutiny of the criminal justice process." As the Chief Justice said:

The fact that Dr Manock had been cross-examined at the trial on his opinion as to the cause of death and his theory as to the method of

¹⁰⁸ However, as the Chief Justice pointed out, this proposition sat uneasily with the claim by Dr. Oettle that the State Forensic Science Centre met international standards in 1994.

death, and that appeals against the conviction had failed, was of limited relevance to the question of whether, in expressing the opinions that he did express, Dr Manock's conduct amounted to incompetence or negligence. The issue was not whether Dr Manock's opinion had been exposed to scrutiny at the trial, or even whether it had been criticised there, and to what effect. The issue was whether, in expressing the opinion that he did in the circumstances that he did, Dr Manock acted in a manner that amounted to incompetence or negligence.

As a result of the quashing of the Medical Board decision, the complaint procedure initiated by Keogh to the Board in 2001 had in 2007 to be started over again. According to *The Australian*, the President of the Board is not keen to undertake this task.¹⁰⁹

9. OTHER RELEVANT CASES IN WHICH DR. MANOCK HAS BEEN INVOLVED

Questions with regard to the quality of some of Dr. Manock's work have been raised throughout his career in South Australia. Many of the concerns were of a recurring

¹⁰⁹ On 28 September 2007 Jeremy Roberts of *The Australian* reported "Trial complaint review." He said that the president of the South Australian Medical Board has grudgingly agreed to hear again a complaint brought by "body in the bath" murderer Henry Keogh against the forensic pathologist who gave evidence at his 1994 trial. But Trevor Mudge said his preference was to drop the matter entirely because, he believed, the Board was not the proper place to judge forensic pathologist Colin Manock's conduct in relation to Keogh's trial, and the autopsy of victim Anna Jane Cheney. "I have concerns that this is an abuse of process," said Dr. Mudge, an Adelaide gynecologist. "The place for testing the evidence and the way it was collected was surely the murder trial. The time to expose the supposed shortcomings of expert witnesses was in the murder trial." But he said the Board had no choice but to hear Keogh's complaint again, after a decision against the Board this week in the Supreme Court.

Chief Justice John Doyle found that the Board had made an error of law in clearing Dr. Manock in 2005 of the complaint of unprofessional conduct. He found that the Board had failed to consider issues of "negligence and incompetence" in judging the conduct of Dr. Manock. Instead, the Board limited itself to comparing Dr. Manock's competence to that of his co-workers in Adelaide at the time—a problematic comparison given that Dr. Manock was the longstanding chief of the Forensic Science Centre. Keogh's lawyer Kevin Borick said Dr. Mudge's comments reduced his confidence in the Medical Board. "He has not understood the decision by the Chief Justice," he said.

nature, and affected the baby deaths cases.¹¹⁰ The following brief outline of some other cases in which he had been involved prior to his work in the baby deaths cases provides some illustrations.

In spite of concerns raised about aspects of Dr. Manock's work by a High Court judge, parliamentarians, Royal Commissioners. and other pathologists, authorities (the government, the Medical Board, and the RCPA among others) have not held any formal inquiry into his performance. It has been argued by lawyers for Keogh that the delay in the release of the inquest into the baby death cases may have had an effect on the Keogh trial. The lesson to be learned, of course, is that a failure to act promptly when doubts arise exacerbates the problem with the potential to derail the whole system. In that way, future openness and security becomes mortgaged to past indifference.

9.1 Deborah Leach, 1971

On the morning of 16 July 1971, as the result of a search, Deborah's body was found by a police officer on a beach near Adelaide. Dr. Manock conducted the autopsy and concluded that Deborah had died by drowning.

Frits Van Beelen was subsequently tried for her murder. Time of death was a critical issue in the case. Deborah had last been seen alive by a witness at 4:00 p.m. and Van Beelen had an alibi from just after 4:30 p.m. Body cooling could not be used to determine time of death because Dr. Manock did not take the body temperature when he had arrived at the scene.

Dr. Manock instead calculated the time of death based on the rate at which a stomach is emptied of its contents. He gave evidence to say that it was "virtually certain" that Deborah was most probably dead around 4:15 p.m. and he could be certain that her death had occurred by 4:30 p.m. "and no later."

¹¹⁰ For an expanded discussion of these cases, see R.N. Moles, *A State of Injustice* (Lothian, 2004). The cases are referred to here by the name of the victims.

A subsequent scientific review of gastric emptying has concluded that the most that could be said about this approach to the timing of death was that it could narrow the possibilities down to "a range of some hours." The authors stated that any suggestion that this method could be exact to "within a half an hour as given in the Truscott case in [Canada] and the Van Beelen case in Australia would seem to be scientifically unsound."¹¹¹

9.2 Derrance Stevenson, 1979

The body of criminal lawyer Derrance Stevenson was found frozen in the freezer at his home on 5 June 1979. He had been shot in the head.

Dr. Manock calculated the time of death by utilizing a body cooling formula taken from a pathology textbook. He said that he had to adjust the formula by 40%, however, because Stevenson's body when found was not prone but bent round in the fetal position, so reducing the exposed surface area. In his autopsy report, Dr. Manock stated:

A body will cool 85% of the temperature differential within 28 hours. However, where the effective surface area is reduced, the time is lengthened and in the above circumstances it is my opinion that the lengthening of cooling time would be about 40%.

The outcome of this evidence was that the death was timed at around the same time that David Szach, 19, who was in a relationship with the 44-year-old Stevenson, was thought to have been in the vicinity. It also meant that another person of interest to the police would have had an alibi. Szach was tried and convicted of murder.

Some years after the trial, Dr. Byron Collins, a consultant forensic pathologist, reviewed the pathology evidence. He reported that the formula used by Dr. Manock was not applicable to this particular case. It had been developed from experiments with bodies in the "prone" position, and the researchers who had developed the formula had stressed

¹¹¹ M. Horowitz & D.J. Pounder, "Gastric Emptying—Forensic Implications of Current Concepts." *Medicine, Science and the Law* 25 (1985) 201–214.

that their findings were not to be used or applied in circumstances that varied significantly from those of their experiments.¹¹²

Dr. Collins further said that "none" of the variable factors that Dr. Manock used in his calculations were matters that could be properly substantiated. For example, Dr. Manock had substituted a liver temperature, whereas the formula involved a rectal temperature. Also, he had assumed a core body temperature at the time of death, but without knowing the room temperature and the length of time between death and placement in the freezer, he would have had little idea of the body temperature at the time of its placement in the freezer.

Professor Bernard Knight, a leading U.K. forensic pathologist who specialized in body temperatures after death, also provided a report after having studied Dr. Manock's report and evidence. He said, "I also cannot agree with the arbitrary assumption of Dr. Manock that a body in a foetal position (which is very variable in itself) would slow the cooling rate of the liver by 40%. This to me appears to be a figure snatched from the air without any scientific validation." He concluded: "Indeed, I think the safest thing for a forensic pathologist to say in these circumstances would be that estimating the time of death in this particular body is so fraught with uncertainty as to be not worth the attempt."¹¹³

9.3 Ken Perry, 1982

Ken Perry was said to be the victim of attempted murder by arsenic poisoning by his wife Emily. Ken, however, believed that he came into contact with lead and arsenic through his hobbies, which involved working on old pianos and pianolas. Dr. Manock diagnosed arsenical poisoning by reading the notes of a doctor who had been treating Ken. He concluded that "the information contained in the case notes seems to have excluded the common accidental sources" and suggested the possibility of malicious administration.

¹¹² Report of Dr. Byron Collins, dated 5 August 1994.

¹¹³ Letter from Professor Bernard Knight to Dr. Collins, dated 14 July 1994.

He did not examine Ken or visit his workshop.¹¹⁴ The case against Emily eventually made its way to the High Court of Australia.

In referring directly to Dr. Manock's evidence, Justice Murphy said that Ken had a history of motorbike accidents, including severe injury to his facial structure that led to symptoms such as rhinitis. He said that Dr. Manock had attributed this condition to arsenical poisoning by Emily. The only problem with that theory was that the condition had existed years before Ken had met her. The condition had, in fact, been the subject of a published medical article on facial reconstruction.¹¹⁵

Justice Murphy said as part of his general criticism of the case:

The evidence, particularly in relation to Duncan [another alleged victim], but also of the other alleged poisonings including that of Mr Perry, revealed an appalling departure from acceptable standards of forensic science in the investigation of this case and in the evidence presented on behalf of the prosecution.¹¹⁶

He said that, in his opinion, "The evidence was not fit to be taken into consideration." We are not aware of any evidence that the strong criticisms made of Dr. Manock's work by the High Court judge in 1982 were effectively followed up on by any of the justice system participants or medical bodies.

¹¹⁴ ABC TV *4 Corners*, "Expert Witness," program, 22 October 2001. Transcript available at http://netk.net.au/Keogh/MediaList.asp

¹¹⁵ Perry v The Queen (1982) 150 CLR 580 (judgment dated 16 December 1982) at 599.

¹¹⁶ Ibid., at 599.

9.4 John Highfold, 1983

John Highfold, 30, an Aboriginal prisoner, was found dead in his cell.¹¹⁷ The case was the subject of a Coroner's Inquest and subsequently among the first cases dealt with by the Royal Commission into Aboriginal Deaths in Custody in 1987–89.

Highfold was known to be epileptic, and was being treated for it by medication (*Dilantin*). Dr. Manock commenced the autopsy within two and a half hours of the death and determined that the cause of death was a massive internal edema in the lungs as a result of an epileptic seizure. An inquest was held just four days later and the Coroner (Mr. Ahern) found that Highfold died from "natural causes."

Dr. Manock later told the Royal Commission that cost had been a factor in his deciding not to undertake blood tests for possible poisoning. He said that full toxicological testing could have cost \$2,000 (in 1988 terms). He said that cost was also a factor—\$18.40 in 1983—in his decision not to test for the level of *Dilantin* in the blood, even though this might have helped to determine if Highfold was being properly looked after.¹¹⁸

Counsel Assisting the Commission said that by regarding Highfold's death as routine, Dr. Manock's approach had been "inappropriate" as part of vital investigations into a death in custody. Counsel asked Dr. Manock if he began the autopsy assuming the conclusion was to be death from epilepsy. Dr. Manock said he would start every autopsy "with an open mind." Dr. Byron Collins, a consultant pathologist retained to evaluate Dr. Manock's

¹¹⁷ Royal Commission into Aboriginal Deaths in Custody—*Report of the Inquiry into the death of John Highfold*, 25 January 1989—J.H. Muirhead Commissioner.

¹¹⁸ See Royal Commission Report (Highfold), at 8.3. The Royal Commission concluded: "I consider it would have been advisable for Dr Manock to have arranged a full toxicological analysis because the medical evidence persuades me that it is impossible to exclude poisoning or consumption of drugs as a cause of death without such testing (Collins 5766–7, Manock 5657, Burns 5895)."

[&]quot;When Dr Manock was asked to perform the autopsy on Highfold he was already scheduled to perform two other procedures the same morning. It seems that this case was simply added to his morning's workload (5622, 5662). It is unlikely, as I have found, that he had received the medical files and he had limited information about Highfold's medical history."

work, criticized in his report the lack of thoroughness of the autopsy, saying that the only major organ to be checked microscopically was the brain. Dr. Manock claimed in court, however, that he had microscopically examined the heart and lungs as well. It was said that he produced microscope slides from his pocket to show that he had done this, even though it was not noted in his report.¹¹⁹

Counsel Assisting asked Dr. Manock that, where a prisoner is found in a cell with no apparent cause of death, would he not agree that a heavy responsibility is placed on the pathologist to examine and exclude all possibilities? Dr. Manock replied, "No I would not." Counsel asked if it would be a failure by a pathologist not to gain access to the full medical records of a prisoner who had died in custody. Dr. Manock said, "Yes."¹²⁰

When the Royal Commissioner released his report he said that it was probable that Dr. Manock's opinion as to the cause of death was incorrect. He said that Dr. Manock had regarded the autopsy as "routine" once it was concluded that the death was not suspicious, and had "relied perhaps too far on assumptions that had not been satisfactorily proven" and not made all relevant investigations.¹²¹

9.5 Kingsley Dixon, 1987

Dixon was also an Aboriginal man in custody found dead in his cell. Dr. Manock performed the autopsy the following day and concluded that he had died from asphyxiation due to hanging. The slight bruise on the deceased's head, Dr. Manock said, was consistent with his having struck his head against the cell wall while hanging.

This case also was considered by the Royal Commission into Aboriginal Deaths in Custody. In his report, the Commissioner said that while the presence of an independently appointed pathologist at the autopsy as a second pathologist had been

¹¹⁹ Royal Commission Report and *The Advertiser*, 20 April and 21 April 1988.

¹²⁰ The Advertiser, 21 April 1988.

¹²¹ See Royal Commission *Report* (Highfold), at 8.3. available at http://netk.net.au/HighfoldHome.asp

requested by the family of the deceased and may have been desirable, the critical importance of an early autopsy could not be overemphasised.¹²² The Splatt Commission discussed above, however, stressed the value of having a second independent checking of forensic experts. A second autopsy was in fact performed on Kingsley Dixon by a pathologist requested by the family, and this occurred a day after Dr. Manock performed conducted his autopsy.

9.6 Gerald Warren, 1984

Gerald Warren, an Aboriginal youth, was found dead on a dirt track outside Port Augusta, South Australia, on 28 December 1984. In 1991, two men, Stefan Niewdach and Alan Ellis, were separately apprehended for various offences and decided to confess to what had happened to Warren.

Dr. Manock said in his report that Warren's death had occurred between noon and 4 p.m. on the day on which he was found. It was revealed at the trial, however, that the death had actually occurred around midnight of the previous day.

Dr. Manock had said that he timed the death on the fact that the body was not fly-blown. He said that he felt that blowflies would be active early in the morning and again in the evening, but he had since learned that blowflies are not very active if the temperatures during the day are very high. He also thought at the time that the activities of scavengers, such as crows, may have discouraged the flies. He said he had also considered the

¹²² See Royal Commission *Report* (Kingsley Dixon), at 5.1. available at http://netk.net.au/DixonHome.asp

The Royal Commission concluded: "Whilst no doubt the presence of an independently appointed pathologist may be desired and may be of comfort to relatives, the critical importance of an early autopsy cannot be over-emphasised. This is so particularly where blood or body tissues are required for analysis (which will usually be the case) to prevent contamination or elimination by post mortem changes. Such analyses are vital when evidence of drugs (including alcohol) is being sought. I am satisfied Dr Manock carefully sought evidence of external violence. Whilst I am surprised that traces of Rohypnol were not evident upon analysis there is no suggestion that this aspect of the examination was other than thorough and in accord with modern scientific practice." Ibid. at 5.1.

amount of bird droppings in making his estimate. On further questioning, however, he agreed that his observations in this respect were just his "layman's observations."

9.7 Terry Akritidis, 1987

Terry's body was found late on the evening of 3 August 1987 in a fairly remote location just south of Adelaide. The body was on the ground near the base of a police communications tower. It was determined that there were no suspicious circumstances.

Dr. Manock gave evidence at the inquest in place of a Dr. Ashby who was said to have conducted the autopsy but was no longer working in South Australia.¹²³ Dr. Ashby's report stated that Akritidis had died of "multiple injuries" and commented that the injuries were "consistent with a fall from a very considerable height."

Dr. Manock reviewed the autopsy notes, and then provided at the inquest explanations for most of what they contained. The Deputy Coroner asked him if he had done some reading about the severity of injuries sustained following falls from particular heights. Dr. Manock said that he had. When asked "Is there a body of material that's directed at that topic of endeavour?", Dr. Manock replied: "I've been going back through some of my old post-mortem reports where people have jumped from car parks and the like...." This, like differential staining discussed earlier, is an example of what some have called "experience-based pathology," that is, based on the pathologist's own experience as opposed to studies that have been published and subjected to peer review and other forms of testing.

There are no photographs of Akritidis's body at the scene. No photographs were taken of the body at the autopsy. Dr. Manock said that in 1987 it probably wouldn't have been usual to take photographs at an autopsy. In any event, he said, this autopsy was started at 8:15 a.m., and the photographer normally arrived at 8:30 a.m. In contrast, the colour

¹²³ The pathology information is taken from the autopsy report by Dr. R.R. Ashby dated 7 August 1987 and from the transcript of Dr. Manock's evidence to the Coronial Inquest.

photographs taken of the Kingsley Dixon autopsy played an important role in facilitating subsequent review of the autopsy.

The autopsy report had stated that death "might have taken place about 12 hours before discovery"—that is, 12 hours before the body was found—putting the time of death at a time when Akritidis was in custody at a police station. Dr. Manock was asked to comment on that statement. He said he thought it to be "more reasonable" to him that the opinion should have been 12 hours before the body was undressed at the autopsy. According to this explanation, Akritidis would then have died around 8:15 p.m. the previous evening—some two hours after his body, with established rigor mortis, was discovered by the police. No one at the inquiry seemed to appreciate the obvious problems with this explanation. This is another case that underlines some of the difficulties of estimating time of death.

10. CONCLUSIONS

Perhaps the most obvious issue to arise from the foregoing discussion is the role and necessity for pathologists to be properly qualified and to engage in continuing professional education. Similar considerations arise in the context of lawyers. Serious consequences can arise from a failure to keep knowledge and procedures up to date and to ensure their constant and consistent application.

People in all areas of forensic practice are aware of the continuing shortage of skilled forensic pathologists. The more that ongoing training and development opportunities are mandated then the greater will be the need to balance those demands with the need to ensure that cases are also dealt with efficiently and effectively, and to ensure proper standards. This is clearly related to issues of funding and resource allocation.

There are obvious institutional and interdisciplinary issues that must be resolved. For example, one of the issues that has been of most concern to us is the realization that the institution that grants specialist qualifications (the Royal College of Pathologists) says that it cannot withdraw qualifications without an adverse finding by the professional disciplinary body (the Medical Board). That body has acknowledged that its role is "self-regulatory." It is funded by the profession that it has to regulate. It has difficulties in

identifying issues that may require its intervention—it has not of its own motion undertaken investigations into any of the issues that we have identified. Even when subjected to pressure over an extensive period of time to investigate and resolve issues, we have seen that, for whatever reason, it has been unable to achieve an effective outcome.

There is a need for speedy and effective follow-up once problems with forensic pathologists become apparent. "The fact that expert witnesses can be subject to fitness to practice proceedings by their regulatory body, is vital to preserving public confidence in expert witnesses and the evidence that they give in court."¹²⁴

We have also faced serious problems in ensuring effective interaction between the professional disciplinary body and the legal system. Where doubts have arisen in legal cases they have not been followed up by an investigation by the body representing the professional experts (the Medical Board). It has failed to appreciate the extent to which full and effective investigations by it could have been of assistance to the courts in their processes and to the enhancement of its own profession. Adverse comments by the courts, as in the Ken Perry case discussed above, have not always been followed up by the medical boards.

There have clearly been conflicts or tensions between investigators in cases, and the apparently determinative effect of scientific findings. If the cause of death is stated as being accident or suicide, for example, should this mean that a potential murder inquiry must be halted? Where investigators have concerns about the scientific input into their investigations, compared with other evidence or information they may have, there should be some body through which an independent assessment of the issues can be raised. Clearly there needs to be some mechanism through which interdisciplinary concerns can be raised and resolved expeditiously. With forensic pathology, there needs to be some

¹²⁴ Lord Goldsmith, Attorney-General U.K., "Expert Evidence, the Problem or the Solution? The Role of Expert Evidence and Its Regulation," the John Bolton Memorial Lecture at the Academy of Expert Witnesses, 25 January 2007. Available at http://netk.net.au/Experts/Expert1.asp

mechanism through which police can insist upon a further independent autopsy or an immediate and independent review of the initial pathology involved in the case.

It would appear that many of the day-to-day practices of the scientific institutions are not sufficiently rigorous to fulfill the expectations of the legal community. There is plainly insufficient investigation, insufficient peer review, and either inappropriate or inadequate documentation of cases. Forensic pathologists working in a non-clinical environment has given rise to significant problems of quality. While there have been some reports suggesting that forensic pathologists should be effectively integrated as part of a broader clinical community, this has not occurred. The circumstances in which two-doctor autopsies should take place should be clearly identified. Perhaps there should be international recognition of the need to clearly articulate appropriate standards to be attained, especially in view of the degree to which specialists these days operate across international boundaries.

There is clearly a need to determine effective responses to concerns that lawyers might have about the quality of expert witnesses, or where expert witnesses might feel subjected to inappropriate pressures to give the investigators what they want. Similar tensions might arise in relation to the interactions between scientists, lawyers, and investigators. Australian law makes it clear that expert witnesses, for example, are not permitted to engage in speculation.¹²⁵ Yet this appears to be a legal requirement more observed in its breach than in its compliance. We have seen pathologists drawing inferences about issues such as fluid dynamics or biomechanics in which they have no expertise. This is an aspect that needs to be addressed in terms of the proper training of forensic pathologists.

It may well be that there is a need for an effective body such as a Review Commission, based upon the model of the Criminal Cases Review Commission in the U.K. Such a body could have the broadened remit to examine *process* issues as well as those arising

¹²⁵ Straker v The Queen—High Court of Australia 20 April, 28 July 1977—Sydney Available at http://netk.net.au/Australia/Straker.asp

Alan Christopher Stockton v The Queen 1981 Court of Appeal New South Wales 5 March 1981 Available at http://netk.net.au/Australia/Stockton.asp

from individual complaints. If such a body were enabled to receive submissions from lawyers, investigators, or scientists about perceived inappropriate conduct or processes, then it could be in a position to make proper recommendations to the various, and numerous, professional or disciplinary bodies. There is clearly a need for such an authoritative body to undertake the task of systemic review and oversight. Such a body could make recommendations to the effect that forensic pathologists (who are trained as doctors) not be allowed to provide opinions in relation to issues of physics and anatomy (for example, fluid dynamics, biomechanics, or ballistics) without specific training in those disciplines.

We suggest that such a commission be enabled to conduct audits or random reviews of case files to ensure that any dysfunctional or inappropriate conduct of cases is identified as soon as possible. As we have seen, there can be important shortcomings in relation to issues of disclosure by forensic experts and by prosecution lawyers that need to be addressed. It should be an important part of the training of any potential expert witnesses (especially forensic pathologists) that they be given adequate and ongoing training as to the maintenance of their objectivity and impartiality as part of their proper role in the legal process. They also need to have a proper understanding of the role and function of the prosecutor and the duty to declare any limitations that might apply to their ability to assist the judicial process.

Equally, the lawyers should also be given appropriate training in relation to the use of scientific experts and with regard to the scientific principles involved in such cases.