

*Stephen Odgers SC**

WHAT LAWYERS SHOULD *DO* ABOUT FORENSIC SCIENCE EVIDENCE

ABSTRACT

This article examines what lawyers – and particularly defence lawyers – must do in challenging forensic science evidence. This article argues that for this to occur there must be a significant increase in legal aid funding.

Professor Edmond, in his article ‘What Lawyers Should Know About Forensic “Science”’,¹ has clearly demonstrated that there are reasons to doubt the reliability of evidence derived from a number of forensic sciences, with issues of inadequate research validation, lack of transparency, lack of appropriate protocols, risks of bias (conscious and unconscious) and inadequate disclosure of limitations and risk of error.

Professor Edmond has also made a persuasive case that the Australian legal system has failed to deal effectively with forensic science evidence. Overseas inquiries have highlighted the problems in comparable legal systems and, as Professor Edmond observes, there is no reason to believe that Australia is immune from those problems.

However, in asking *why* the legal system has not been effective in dealing with the challenge of forensic science evidence – and what reforms are needed – Professor Edmond has asked questions for which the answers are perhaps less clear.

In my opinion, the problem does not derive to any significant extent from the current law relating to the admissibility of forensic science evidence. The common law in this area, which still applies in Queensland, South Australia, and Western Australia, provides generally adequate safeguards against unreliable forensic science evidence, at least if that law is properly enforced. For such ‘expert opinion’ evidence to be admissible, the court must be satisfied that:

- the ‘field of expertise’ in question is a ‘reliable’ body of knowledge or experience;²

* Senior Counsel, Sydney; Chair, Criminal Law Committee, NSW Bar Association.

¹ Gary Edmond, ‘What Lawyers Should Know About the Forensic “Sciences”’ (2015) 36 *Adelaide Law Review* 33.

² See *R v Bonython* (1984) 38 SASR 45, 47; *Osland v The Queen* (1998) 197 CLR 316, 336; *R v T* [2010] EWCA Crim 2439 (26 October 2010).

- the witness has expertise in that field;
- the particular opinion is based on that expertise (rather than being a mere ‘*ipse dixit*’);³ and
- the opinion will assist the tribunal of fact.⁴

As regard the position under the Uniform Evidence Law,⁵ applying in the other Australian jurisdictions, it is true that the law has been somewhat unsettled but current authority indicates that there are similar safeguards to those applicable under the common law. It is reasonably clear that a court must be satisfied that:

- the field of ‘specialised knowledge’ requires more than ‘belief’ – ‘knowledge’ refers to ‘any body of known facts or to any body of ideas inferred from such facts or accepted as truths *on good grounds*’;⁶
- the witness actually has specialised knowledge regarding the subject matter of the opinion;⁷
- the particular opinion is ‘substantially based’ (s 79) on that specialised knowledge (with the consequence that the reasoning of the witness must be exposed⁸ and it must be established that the opinion is not simply a ‘subjective’⁹ opinion or mere ‘speculation’¹⁰); and
- the opinion will assist the tribunal of fact (in that it will simply not be relevant where the witness is not in a ‘better position’ than the tribunal of fact to determine the matter about which the opinion is expressed).¹¹

³ See *Makita (Australia) Pty Ltd v Sprowles* (2001) 52 NSWLR 705, 743–4 [85].

⁴ *Murphy v The Queen* (1989) 167 CLR 94, 110.

⁵ *Evidence Act 2011* (ACT); *Evidence Act 1995* (NSW); *Evidence (National Uniform Legislation) Act 2011* (NT); *Evidence Act 2001* (Tas); *Evidence Act 2008* (Vic). This legislation, alongside the *Evidence Act 1995* (Cth), will be referred to collectively as the Uniform Evidence Law.

⁶ *Honeysett v The Queen* (2014) 253 CLR 122, 131–2 [23] (emphasis added).

⁷ See *Campbell v The Queen* (2014) 312 ALR 129, 166 [229]–[234].

⁸ See *HG v The Queen* (1999) 197 CLR 414, 428 [41]; *Dasreef Pty Ltd v Hawchar* (2011) 243 CLR 588, 605 [42].

⁹ *Honeysett v The Queen* (2014) 253 CLR 122, 137 [43]. See also *R v Tang* (2006) 65 NSWLR 681, 715 [155], where Spigelman CJ endorsed the view of the Court of Appeal in England that an opinion must have been ‘only the subjective opinion’ of the witness because of the absence of ‘any national database ... or any accepted mathematical formula’ from which ‘conclusions could *safely* be drawn’ (emphasis added): see *R v Gray* [2003] EWCA Crim 1001 (27 March 2003) [16].

¹⁰ *HG v The Queen* (1999) 197 CLR 414, 428 [41].

¹¹ *Smith v The Queen* (2001) 206 CLR 650, 654–5 [9].

It may be accepted that some ambiguity remains as to what ‘good grounds’ requires to establish ‘knowledge’, but it is likely that the High Court will (when called upon to decide the question) import considerations of ‘validity’ (or even ‘reliability’), as has the United States Supreme Court in respect of a similar provision in the US Federal Rules of Evidence.

Three recent examples may be given of cases where appellate courts have applied these rules to hold that forensic science evidence should have been ruled inadmissible at trial:

- *Campbell v The Queen*: the evidence of an Associate Professor was held to be entirely inadmissible because neither his formal qualifications nor his course of study established that he had acquired specialised knowledge regarding the mechanics of the human body in terms of movement and reactions.¹²
- *Honeysett v The Queen*: the opinion of an expert in anatomy that an offender and the defendant both had certain anatomical characteristics (such as ‘oval shaped heads’) was not based on his knowledge of anatomy but ‘his subjective impression of what he saw when he looked at the images’ of the offender and the defendant – the evidence ‘gave the unwarranted appearance of science to the prosecution case that the [defendant and the offender] share a number of physical characteristics.’¹³
- *Gilham v The Queen*: an opinion from forensic pathologists that stab wounds in three different victims were ‘similar’ (and thus showed a pattern) was inadmissible because it was not shown to be substantially based on the experts’ experience in stab wounds.¹⁴

Further, under both the common law and the Uniform Evidence Law, the courts have a ‘discretion’ to exclude otherwise admissible forensic science evidence where its ‘probative value’ is outweighed by a ‘danger of unfair prejudice’. That allows the court to exclude the evidence when persuaded that there is a real risk that the tribunal of fact will give the evidence significantly more weight than it really deserves.

Even if forensic science evidence is admitted, the right of the defence to cross-examine fully the forensic scientist means that issues relating to the reliability of the field of expertise, the level of expertise of the witness, the reasoning of the expert and whether a particular opinion is substantially based on that expertise *can* all be revealed. Indeed, if such a process is properly engaged in, it would not usually matter much whether the evidence is ruled admissible or inadmissible.

¹² *Campbell v The Queen* (2014) 312 ALR 129, 166 [229]–[234] (Bathurst CJ). See also *Wood v The Queen* [2012] NSWCCA 21 (24 February 2012) [467].

¹³ *Honeysett v The Queen* (2014) 253 CLR 122, 138 [45].

¹⁴ *Gilham v The Queen* [2012] NSWCCA 131 (25 June 2012) [345].

The real problem, then, is not the current legal framework but the fact that, in many cases, the defence trial lawyer lacks the knowledge or resources to engage in a thorough testing of the evidence of the forensic scientist so as to point out its flaws or weaknesses – with the consequence that the evidence is both ruled admissible and is inadequately challenged in cross-examination. In the cases of *Campbell*, *Honeysett* and *Gilham*, the evidence was admitted at the trial and its weaknesses were not properly exposed before the jury – leaving it to an appeal court to correct the consequent miscarriage of justice.

It is true that some criminal defendants are well-resourced and they can fund effective challenges to forensic evidence. But the vast majority are not, and depend on legal aid. Legal aid commissions around the country have been experiencing reduced budgets for some years, largely as a result of significant reductions in Commonwealth funding. They can only pay lawyers a very low rate compared with private work, with the consequence that the quality of representation tends to decline and there is a limited incentive for the lawyers who do take the work to engage in the time-consuming task of thoroughly preparing an effective challenge to forensic evidence. They will not be paid for it. While the commissions will usually fund obtaining a report from another expert, the limited available funds mean that the lawyer may well not be given the ammunition necessary to effectively challenge the prosecution expert.

The lack of defence resources is particularly significant where there are epistemic problems with the particular forensic science, rather than concerns with the individual scientist giving evidence for the prosecution. Notwithstanding the fact that the onus is on the prosecution to satisfy the court that the field of expertise or ‘specialised knowledge’ meets standards of reliability or validity (‘good grounds’), past acceptance of evidence derived from that field will put a practical burden on the defence to show that there is a real issue whether those standards can be met. That will require serious resources, investigation and preparation. It is not something that your average legal aid defence lawyer could realistically contemplate.

Professor Edmond’s suggestion that prosecutors take more responsibility in ensuring the quality of forensic science evidence has merit but cannot be carried too far. It may be accepted that some prosecutors have gone too far in pursuit of a conviction by relying on demonstratively unreliable forensic science evidence¹⁵ and failing to comply with established duties of fairness, to ‘fairly’ assist the court to arrive at the truth. Ensuring a culture of compliance with those duties is essential. However, it is not, and realistically cannot be, the role of the prosecutor to engage in a thorough review of a forensic science prior to adducing evidence derived from it. While the prosecutor must not adduce evidence the prosecutor believes, or even suspects, to be unreliable, the prosecutor cannot be expected to investigate whether a particular recognised expert in an accepted field of forensic science is able to express reliable opinions.

¹⁵ See, eg, *Wood v The Queen* [2012] NSWCCA 21 (24 February 2012).

Nor can the judges fill the gap left by under-resourced defendants. In our adversarial system of criminal justice, the judges must remain above the fray. The judge's role is to ensure procedural fairness for the parties and rule on questions of law, not to determine the scope of the evidence put before the court or to insist that challenges are brought with respect to certain categories of evidence. Of course, it is vital that judges are willing to apply the law when such challenges are brought and willing to insist that legal safeguards are complied with, but they cannot be expected to initiate the challenges or adduce the evidence needed to show that there is a real issue to be determined.

I appreciate that some have suggested that the adversarial system is unsuited to the task of finding 'scientific truth' and have, at least by implication, supported replacement of that system with a more inquisitorial model. My view is that any such change would be most unlikely to provide a solution. The fundamental benefit of an adversarial model is that a party in the legal proceedings has the opportunity to challenge and test evidence adduced by the opposing party. Properly resourced, such testing can illuminate the weaknesses in such evidence and thereby facilitate just outcomes. Reliance on an investigative judge, linked to prosecution authorities, is most unlikely to provide an adequate safeguard against questionable forensic science evidence coming from people closely connected to law enforcement. Equally, as Professor Edmond has said, such procedural solutions as court-appointed experts or concurrent expert evidence will not address the problems raised in his article.

While a number of appeals have in recent years exposed miscarriages of justice arising from forensic science evidence, that is also plainly not an adequate safeguard. Resources for appeals, like trials, are limited. Rules preclude the adducing of new evidence that was reasonably available at the time of the trial. There are significant limitations on the taking of 'judicial notice'. It can be difficult to expose problems retrospectively. In any event, it is far preferable to prevent the miscarriage of justice in the first place rather than try to remedy it at some later time.

My conclusion is that trial defence lawyers must do more to challenge forensic science evidence but this can only happen if they are given the resources to do that. One possibility is the establishment of an adequately funded independent body given the task of evaluating forensic science evidence and providing appropriate assistance to defence lawyers. Another is a *significant* increase in legal aid funding to allow effective challenges to forensic science evidence. Until such steps are taken, the risk of miscarriages of justice arising from unreliable forensic science evidence will inevitably remain.

