No more Laissez Faire? Expert Evidence, Rule Changes and Reliability: Can more effective training for the Bar and Judiciary prevent miscarriages of justice?

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Abstract:

The apparent link between miscarriages of justice in prosecutions involving expert evidence and the level of training provided to the legal profession (the Bar in particular) and the Judiciary in respect of such evidence was highlighted in 2005 with the publication of the House of Commons Science and Technology Committee Report ‘Expert Evidence on Trial’\(^2\). The Law Commission, in the 2011 Report ‘Expert Evidence in England and Wales’\(^3\) subsequently comprehensively addressed the same issue. This article seeks to consider why appropriate training in relation to expert evidence is so necessary and questions whether, in the context of the amendments to what is now Part 19 of the Criminal Procedure Rules (CrimPR19) and Part 19A of the Criminal Practice Direction (CrimPD19A), there have been sufficient developments in training to effect a cultural change within the legal profession and ultimately substantially reduce the risk of future miscarriages of justice. Finally the article debates the nature of required training, arguing that much more detailed

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\(^1\) We should like to thank Professor Tim Wilson and Dr Michael Stockdale, Northumbria Centre for Evidence and Criminal Justice Studies for their assistance with earlier drafts of this article.

\(^2\) Science and Technology Committee Forensic Science on Trial, Session 2004–2005, HC 96-1.

\(^3\) Law Commission, Expert Evidence in Criminal Proceedings in England and Wales, Cm 325, (2011)
training is required than has previously been considered and addresses where this training best sits.

**Introduction**

The assumption that the traditional adversarial safeguards of challenge by cross-examination, the adduction of contrary expert evidence, and directions by the trial judge were sufficient to prevent miscarriages of justice in cases where unreliable expert evidence was admitted was doubted by the Law Commission. The Commission recommended, alongside the introduction of a statutory admissibility test incorporating a reliability limb, an enhanced training regime for the Bar and the Judiciary. Whilst the Commission’s Report persuaded the Government of the need to act, they were not persuaded that a statutory approach was cost effective. As a ‘novel’ alternative approach amendments were made to what is now CrimPR19 (then CrimRP33) and CrimPD19A (then CrimPD33A) was introduced. The intention is to ensure that judges are provided at an early stage with more information about the expert evidence proposed to be adduced with the potential to “.... increase the likelihood of the trial judge and the opposing party, where appropriate, challenging expert evidence”. The authors doubt whether this greater, and earlier, engagement with the issues relevant to the reliability, and therefore admissibility, of expert evidence has actually occurred, considers the relevance of training in achieving this aim, and the most appropriate form and timing of such training. In particular, the article argues that training must be introduced at a much earlier stage than currently envisaged if there is to be a cultural shift within the profession that empowers members of the Bar and Judiciary to feel confident to challenge expert evidence.

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4 ibid at 1.20
5 ibid. at 1.43
where appropriate and that much more detailed training than is currently being considered is required if practitioners are to be able to use the CrimPD19A.5 and CrimPD19A.6 criteria effectively.

**The Origins of Reform**

In its Report, Forensic Science on Trial, the House of Commons Science and Technology Committee expressed concern at the lack of safeguards to prevent miscarriages of justice in cases involving expert evidence, including the lack of mandatory training for the Bar and the Judiciary and the ‘complacency of the legal profession in regard to these matters’. Specific reference was made to the well-publicised cases of Sally Clark and Angela Cannings. Both women were convicted of murdering their infant children in cases based heavily upon expert evidence. Both were acquitted on appeal.

In the case of Sally Clark there were 2 substantive issues. The first was the non-disclosure of records of post-mortem microbiological tests in respect of one child. The second was the nature of the statistical evidence given to the jury by one of the experts relied upon by the prosecution, Professor Roy Meadow (Emeritus Professor of Paediatrics and Child Health). Professor Meadow was permitted to give (without objection from the defence) misleading evidence that the likelihood of 2 instances of Sudden Infant Death Syndrome within the same family was 1 in 73 million. According to the Court of Appeal this was very likely to grossly overstate the case. The court also criticised the inappropriate manner in which Professor Meadow had been permitted to present the statistical evidence. He referred to the chances of 2

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8 See House of Commons Science and Technology Committee, above n. 2 at 177 - 182
9 Above n. 2 at 189
11 R v Clark (Sally) (2003), EWCA Crim 1020
12 R v Cannings (Angela) (2004) EWCA Crim 1
13 See R v Clark above, n. 13 at 178
instances of sudden infant death syndrome within the same family as equating to the chances of backing four 80 to 1 winners of the Grand National in successive years.

The Court of Appeal stated:

“We are quite sure that the evidence should never have been before the jury in the way that it was when they considered their verdicts. If there had been a challenge to the admissibility of the evidence we would have thought that the wisest course would have been to exclude it altogether.”

The Science and Technology Committee commented that whilst much was made in the press of the expert’s failings in this case “little attention was given, at least in public, to the lawyers and judges involved, who may have been able to prevent the miscarriage of justice from being carried out, but failed to do so.”

Alongside their recommendation of a ‘gate-keeping’ test for expert evidence, developed in partnership with judges, scientists and other key players in the criminal justice system – based upon the US Daubert test, the Report also addressed, at length, the nature of training for the legal profession in respect of expert evidence. It expressed ‘great concern’ at the lack of mandatory training for lawyers in respect of expert evidence and noted that the legal profession appeared largely to believe that the nature of the adversarial system offers sufficient effective opportunities for the testing of expert evidence.

Direct reference was made to evidence received from The Bar Council:

“Scrutiny takes place because the adversarial system provides for the independent challenge of the prosecution view. This is an important

\[14\] Above, n. 11 at 177
\[15\] Above n. 2 at 169
\[16\] Above, n. 2 at 55
\[17\] Above, n. 2 at 180
safeguard. The second line of protection is the defence advocate who can be expected to prevent improper evidence or unsupported assertion. A third line is the judge who is expected to do the same. In our view these safeguards in practice have proved sufficient albeit no system is perfect.”\textsuperscript{18}

The stance of the Bar Council (along with that of the Home Office and CPS on the same issue) was described as “complacent”.\textsuperscript{19} It is perhaps not surprising given the voluntary nature of the training identified by the Bar Council as being undertaken by members of the Bar in respect of expert evidence that the Report concluded:

“In view of the increasingly important role played by DNA and other forensic evidence in criminal investigations, it is wholly inadequate to rely on the interest and self-motivation of the legal profession to take advantage of the training on offer. We recommend that the Bar make a minimum level of training and continuing professional development in forensic evidence compulsory.”\textsuperscript{20}

The Report also referred to the “similarly disturbing picture” in respect of the levels of training given to judges.\textsuperscript{21} It comments, “Improving the training given to lawyers in the understanding and presentation of forensic evidence should eventually produce judges with a more solid understanding of these topics.” In respect of this, the Report recommended, particularly in light of the “rapid pace of scientific progress” that “judges be given an annual update on scientific developments of relevance to the courts”.\textsuperscript{22}

\textsuperscript{18} Above n. 2 at 174
\textsuperscript{19} Above n.2 at 175
\textsuperscript{20} Above n. n.2 at 180
\textsuperscript{21} Above, n.2 at 181
\textsuperscript{22} Above n.2 at 182
The 2005 Report prompted consideration of the issue of the admissibility of expert evidence by the Law Commission. In its 2009 Consultation Paper, the Commission noted that the courts in England and Wales have been reluctant to exclude expert evidence on the ground of evidentiary unreliability and have tended to adopt “a policy of laissez-faire.” The Commission commented, again with particular reference to miscarriages of justice including that of Sally Clarke and Angela Cannings (also Dallagher and Harris and Others) that, “in short, expert evidence of doubtful reliability may be admitted too freely, be challenged too weakly by the opposing advocate and be accepted too readily by the jury at the end of the trial.”

The Commission provisionally proposed the introduction of a statutory admissibility test incorporating a reliability limb for expert evidence in criminal proceedings. The Commission was clear, however, that the introduction of a statutory test would not, of itself, provide a full solution and identified further measures which would complement the introduction of the test and “would solve many of the problems associated with expert evidence in criminal proceedings”. Among them was an enhanced training curriculum for new judges and junior lawyers which would:

(a) require them to have an understanding of the factors to be borne in mind when assessing the viability of a scientific (or purportedly scientific) hypothesis; and

(b) equip them to intervene effectively if an expert witness presents his or her evidence in an inappropriate way or strays from his or her legitimate field of expertise or provides an opinion predicated on unsound assumptions.

Specifically, the Report identified particular concerns about the ability or willingness of trial advocates to address methodological flaws in cross-examination before

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23 Law Commission, Expert Evidence in Criminal Proceedings in England and Wales, (Law Com Consultation No 190, 2009)
24 ibid at 3.14
25 ibid at 2.27
26 ibid at 1.10
27 ibid at 1.15
Many respondents to the Consultation supported the proposal of enhanced training, including the Criminal Bar Association (which advocated specialist training for practitioners, the judiciary and experts and enhanced Judicial Studies Board directions to provide further safeguards by explaining the limits and potential for error in respect of expert evidence) the Law Reform Committee of the Bar (which considered that the benefits of training would greatly outweigh the costs), the Criminal Cases Review Commission (which was of the opinion that improved training of solicitors, counsel and judges could, by itself, go some way towards reducing the risk of miscarriages of justice as a result of misleading or inaccurate expert evidence and Northumbria University School of Law’s Centre for Evidence and Criminal Justice Studies which agreed that the effectiveness of any introduced admissibility test would depend upon the ability of counsel to assess, and oppose where appropriate the admissibility of expert evidence and the ability the experts who are advising them to identify flaws in expert evidence.

The message is one that is repeated elsewhere. Roberts, points out that in any reform of the procedure to determine the admissibility of expert evidence must address the problem of ‘the decision-maker’s lack of competence in the matters to which the expert proposes to testify’. 29

Indeed, numerous academic studies have repeatedly revealed the inconsistent performance of the adversarial legal system to advances in science30 along with a

28 ibid. at 2.9
significant body of case law. In relation, specifically to training, Edmond advocates “consciousness raising and reconceptualization” arguing that:

“The failure of lawyers and judges to have unilaterally recognised these problems [with the admission of unreliable expert evidence] suggests that trials and appeals have very real limitations when it comes to regulating forensic science and medicine evidence... Insufficient attention to the reliability of expert evidence and the effectiveness of trial processes means that legal institutions are very likely to mismanage incriminating expert evidence into the foreseeable future.”

In its final report the Law Commission recommended the introduction of a statutory admissibility test incorporating a reliability limb supported by an enhanced training regime for the Judiciary and the Bar. The Government declined to legislate, (essentially on the basis of cost) and instead invited the Criminal Procedure Rules Committee to make amendments to what is now CrimPR19 and is accompanied by CrimPD19A, both of which took effect from October 2014.

**Procedural Reform**

Implementation of the Commission’s proposals by way of procedural reform has been described as ‘a novel way of implementing an excellent Report’. CrimPR19.2, makes clear that an expert’s duty to the court incorporates a duty to give an opinion which is objective and unbiased and falls within the expert’s area or areas of expertise, a duty to define the expert’s area or areas of expertise and an obligation, in giving evidence, to draw the court’s attention to any question to which the answer

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33 ibid. at 929
34 Above, n. 3 at 1.38 and set out in a draft Criminal Evidence (Experts) Bill at Appendix A
35 See Lord Thomas of Cwmgiedd, above, n. 6 at 17
would be outside the expert’s area or areas of expertise. CrimPR19.4(a) requires experts to provide in their reports details of qualifications, relevant experience and accreditation. CrimPR19.3(c) now requires an expert who wishes to introduce an expert’s evidence other than as an admitted fact to serve with the report notice of anything of which the party serving it is aware which might reasonably be thought capable of detracting substantially from the credibility of that expert. In addition CrimPD19A.1 summarises the common law position that expert opinion evidence is admissible in criminal proceedings before 19A.5 and 19A.6 set out, respectively, those factors which may be taken into account in determining the reliability of expert opinion (particularly expert scientific opinion) and potential flaws which may detract from reliability.36

At the time of their introduction, the Lord Chief Justice stated:

“With the changes in the common law that paralleled the Report, the Rules and the Practice Direction together with the work undertaken by the Advocacy Training Council, the Report has been nearly implemented.”37

The common law changes to which his Lordship referred comprised the principle, developed in recent jurisprudence of the Court of Appeal, that ‘in determining the issue of admissibility the court must be satisfied that there is a sufficiently reliable scientific basis for the evidence to be admitted’38. It is to the application of this principle that the guidance provided by CrimPD19A relates.

The question of whether the procedural changes fully reflect the recommendation of the Law Commission is considered elsewhere in this special edition.39 However the suggestion that the work of the Advocacy Training Council (now the Inns of Court College of Advocacy (ICCA)) complement those changes to such an extent that the

36Appendix 1  
37Above n. 6 at 17  
38R v Dlugosz [2013] 1 Cr. App. R. 32 at 11  
Report can be considered to be nearly implemented is one which is discussed here as part of a wider question on the extent to which the changes are utilised and are making an impact upon daily practice in courts across England and Wales.

Northumbria Centre for Evidence and Criminal Justice Studies - Empirical Research

The Northumbria Centre for Evidence and Criminal Justice Studies (NCECJS) undertook a national survey of criminal barristers almost one year after the introduction of the procedural changes. 51% of respondents indicated that they had dealt with 10 or more cases involving expert evidence since October 2014. 30% of respondents had no knowledge of the amended Rules or the Practice Direction. Of the 70% that were aware, 75% indicated that they were familiar or very familiar with them. However, 75% indicated that they had little or no effect on the admissibility of expert evidence in the cases they were involved in. Perhaps even more worryingly, 56% indicated that they would have no effect on their likelihood to challenge expert evidence, or would make it less likely.

The survey invited the respondents to consider each of the 19A.5 factors and asked how comfortable they were that they had the adequate training and knowledge to make an assessment in relation to each, graded on a scale of 1 to 5 with 1 being completely unable and 5 being fully capable. The average response was 2. In relation to 19A.6 respondents were asked to again grade themselves on how comfortable they were that they had adequate training and knowledge to assess expert evidence with reference to each of the listed flaws. The average response was 2.5.

That the respondents were not confident with 19A.5 and 19A.6 factors is perhaps not surprising given the scientific nature of some of the assessments to be made. Expert evidence is by its very definition outside the experience of non-experts, and consequently, it may be that some lawyers are less comfortable and less confident when dealing with the reliability of such evidence where that raises issues of a
technical nature than they are in dealing with issues such as the competence of experts and expert witness bias, which may at times provide fertile ground for cross-examination without requiring detailed understanding of underlying expert methodologies. Certainly that was the overwhelming view expressed by members of the Bar in attendance at 2 symposiums held by NCECJS to consider this topic.\(^{40}\) It is perhaps no surprise then that an overwhelming 82% of respondents to the survey felt that more extensive training was required in order for CrimPR19A and PD19A to be fully implemented.

The fact that 30% of those responding to the survey were unaware of the Rule changes is disconcerting. Whilst the survey was relatively small and not sufficiently broad to represent a settled national picture, it did draw representation from all circuits and from varying duration of Call \(^{41}\) Whilst it was certainly not comprehensive enough to be conclusive it does provide a worrying snapshot which suggests that further and more comprehensive empirical research would be justified. At the most basic level the Rules and Practice Direction can have no effect if practitioners are unaware of them. Also, the survey demonstrated that even those criminal practitioners who were aware were not uniformly taking them into account or changing the way they approached the admissibility of expert evidence. There certainly appears to be less judicial expectation that counsel are aware of the provisions than existed in respect of the bad character and hearsay evidence\(^{42} \, \text{and} \, ^{43}\).

Whilst these were statutory changes and more fundamentally altered the admissibility mechanism for those categories of evidence, this does not, it is suggested, fully explain the extent of the apparent lack of engagement, or the apparent lack of judicial expectation of advocates in relation to the new provisions.

\(^{40}\) The 2 events were hosted by the Northumbria Centre for Evidence and Criminal Justice Studies. The first was a seminar which took place at Northumbria University which was attended by members of the local Judiciary and Bar. The second was a national symposium, which took place on 11th September 2015, at Inner Temple and was attended by representatives of many of the key bodies involved in the criminal justice system.

\(^{41}\) The online survey was circulated to members of the Bar of England and Wales via the Circuits and the Bar Council. 52 barristers responded. Each of the circuits was represented in those responses. 73% declared themselves to be of 15 years call or over. 27% declared themselves to be under 15 years call.

\(^{42}\) A number of comments to this effect were recorded at the 2 symposiums hosted by NCECJS. Above, p. 40.

\(^{43}\) Criminal Justice Act 2003
Although there is conflicting debate on the number of contested cases which involve scientific evidence\(^{44}\) the Lord Chief Justice pointed out to the Criminal Bar “the vast majority of serious cases, and a significant proportion of all Crown Court cases, now include presentation of one or more types of forensic evidence.”\(^{45}\) Also notable is the almost complete absence of appeals in respect of the new provisions.\(^{46}\) Although the reasons for this are impossible to determine precisely, the survey data would suggest it is not because the provisions are being applied rigorously, but rather that they are rarely being applied at all. This can be contrasted with the numerous hearsay and bad character appeals following the introduction of the Criminal Justice Act 2003’s hearsay and bad character provisions.

Edmond argues that we need to understand why so few judges (and we would add advocates) have been attentive to reliability. The Law Commission reported that there may have been a culture of acceptance of expert evidence on behalf of some trial judges.\(^{47}\) Edmond goes on to propose that:

“... in order for the reforms to achieve the desired ends, there needs to be a change in culture and levels of technical sophistication among practising lawyers and judges. Lawyers and judges must understand why traditional practice is inadequate and be able and willing to change.”\(^{48}\)

It is argued that this change in culture can only be achieved through training. The reluctance of judges and advocates to address inadequacies in practice is caused by lack of knowledge and/or competence, which creates a culture of deference to the ‘expert’. Advocates who are armed with the correct knowledge and skills are likely

\(^{44}\) Carr, Piasecki, Tulley and Wilson, “Opening the scientific expert’s black box: ‘critical trust’ as a reformative principle in criminal evidence”, forthcoming.

\(^{45}\) Above, n.6 at 4

\(^{46}\) The only relevant authority is *R (on the application of Wright) v the Crown Prosecution Service* [2015] EWHC 628 (Admin).

\(^{47}\) Above, n. 3 at 1.17,

to be far more competent to challenge the admissibility and where admitted, the weight of evidence before the jury.

**Current Training**

As demonstrated below the provision of training in respect of expert evidence remains limited and largely voluntary. Certainly, the clear recommendation from the Law Commission that “appropriate training on how to determine evidential reliability, particularly in relation to evidence of a scientific nature, should be undertaken by all judges and lawyers involved in criminal proceedings” appears to remain unimplemented.

The Law Commission’s suggestion that “training should also be provided to prospective lawyers, newly-qualified lawyers and experienced practitioners” is key to a change in culture, as is the idea that the CPD requirements for those who undertake criminal work dictate that they attend approved training addressing scientific methodology and statistics. Until expert evidence becomes a fixed and expected element of training and professional development it will remain outside the comfort zone of many practitioners. Five years after the Law Commission’s Report and two years after the changes to the Criminal Procedure Rules and the introduction of the Practice Direction little progress has been made towards this aim.

The training of prospective barristers on the Bar Professional Training Course (BPTC) is currently subject to consultation as part of ‘Future Bar Training’, the Bar Standards Board’s programme of regulatory change and it not yet clear what the future holds. However, currently the provision of training in respect of expert evidence across the Providers of the BPTC remains fundamentally unchanged. Students

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49 Above n.3 at 1.43
50 Above, n. 3 at 1.43; fn 45
receive compulsory knowledge-focused training only in respect of the rules of evidence and procedure applicable to expert evidence. Examinable material on the use of expert opinion evidence at trial will consist of competence of expert witnesses, matters calling for expertise, opinions on ultimate issues, the duty of experts and the function and weight of expert evidence. There is no requirement that students be trained either in basic scientific methodology or statistics, or in relation to the advocacy skills required to examine an expert witness. This is perhaps understandable historically given that the ‘overarching’ aim of the BPTC is to “prepare students of the Inns of Court for pupillage at the Bar”. However the use of forensic evidence is on the rise and Sir Brian Leveson has indicated that ‘the vast majority of serious cases, and a significant proportion of all Crown Court cases, now include presentation of one or more types of forensic evidence.’ Greater training on expert evidence at BPTC level is necessary to ensure that there is awareness and interaction with the challenges associated with expert evidence from the very start of professional education. If students are familiar with, and trained in respect of, expert evidence from the early stages of their career the prospect of such evidence being viewed as outwith the advocate’s standard area of expertise decreases and with it the potential for developing advocates who are both competent and confident in dealing with such evidence increases. That is the cultural shift required to ensure the Bar and Judiciary engage with the complex issues surrounding the admissibility and use of expert evidence.

In their educational capacity, the four Inns of Court provide training for BPTC students, pupils and new practitioners. All pupils are required to undertake certain activities in order for pupillage to be certified as complete and new practitioners must attend training under the CPD regime of the New Practitioner Programme. Although there are compulsory elements to both, including an advocacy training course in the first 6 months of pupillage and a further advocacy training within the

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52 BPTC Handbook, Academic Year 2015/16 at 19
53 ibid. at 1.2.2
55 Lincoln’s Inn, Gray’s Inn, Inner Temple and Middle Temple
56 The New Practitioners Programme operates in the first 3 years of practice
first 3 years of practice there is no mandatory requirement that the programmes involve any teaching in respect of expert evidence. There is also no mandatory training in respect of the general methodology of areas of expertise. This is currently a real missed opportunity to ensure that pupils and new practitioners are engaging in this notoriously difficult aspect of law.

There are however ongoing developments, The Inns of Court College of Advocacy (ICCA)\(^\text{57}\) are in the process of developing, via the Research and Development Committee’s working group on Expert Witnesses “a package of materials to enhance the training of advocates”\(^\text{58}\) and a guide for handling statistical evidence in conjunction with the Royal Statistical Society. This is part of what is described as a “wider ATC project on promoting reliability in expert evidence”.\(^\text{59}\) The guide is due to be piloted in the autumn of 2016 (2 years on from the amendments to the CrimPR and the introduction of the PD).

In terms of the development of materials to enhance the training of advocates, progress has been slow. It appears that the motivation and resources for the development of training in this area is very different to those behind, for example, the current training programme in respect of the vulnerable (Advocacy and the Vulnerable). This national programme developed and delivered by the ICCA in response to the Government’s September 2014 paper, ‘Commitment to victims – strengthening the protection for victims by making the experience of going to court a better one’ will see every practitioner undergo compulsory training in the handling of vulnerable witnesses through a national training programme. There is a clear implication for those members of the profession who do not undertake the training on vulnerable witnesses:

“By March 2015 we will: devise a requirement that to be instructed in cases involving serious sexual offences, publicly-funded advocates must have

\(^{57}\) Formerly the Advocacy Training Council
\(^{59}\) ibid
undertaken approved specialist training on working with vulnerable victims and witnesses.”

There is no suggestion there will be a similar requirement in respect of expert evidence training nor that any training will be compulsory. It is suggested that both are imperative.

The Lord Chief Justice, the Royal Society and the Royal Society of Edinburgh, on 11th April 2016, launched their project to develop a series of ‘primers’ – “standardised documents relating to the most popular areas of forensic science, which would present the basic science in an accessible, plain English format.” They are “designed to assist the judiciary, legal teams and juries when handling scientific evidence in the courtroom.” DNA analysis is identified as the first area to be addressed. In addition seminars are planned for ‘senior judges’ on memory in testimony, probability and mental capacity. It is also hoped that training in expert methodologies will ultimately feature as part of the Judicial College training calendar although there is no date for this.

The work of the Inns of Court College of Advocacy is ongoing and the development of ‘primers’ is to be welcomed but progress is slow. This is in part understandable given the difficulties with funding and the fact that the ICCA has been concentrating its efforts on the vulnerable witness programme. It is also accepted that the development of primers is a complex undertaking, even in the more settled areas of forensic science. However, the reality is that the Bar are presently no better trained in respect of expert evidence than they were prior to 2011. This is the case in relation to the fundamentals of the science, the application of the relevant procedural rules and the advocacy skills most effective in the presentation and challenge of such evidence. There is also concern that the practicalities of the

61 Above, n. 6 at 44
63 Ibid.
application of CrimPR19 and CrimPD19A have not yet been fully considered. In the symposiums held by NCECJS, members of the Bar and the Judiciary expressed the view that while the procedural rules and practice direction are theoretically very useful, they would struggle to find a practical application when cases are not effectively managed from the outset with the new provisions in mind, when evidence is not disclosed early enough and judges (with a mind-set of austerity and strong case management) are not inclined to grant adjournments to allow for more detailed consideration of the evidence or a challenge to it.64

It is vital that fundamental, mandatory training for all advocates dealing with expert evidence is made available as soon as possible. Such training should, as a very minimum deal with understanding of basic scientific methodologies, the application of the Rules and Practice Direction and the advocacy skills needed to effectively present and challenge expert evidence during trial. Introductory training should feature at BPTC level. Such early training will inculcate within the profession an understanding that dealing with expert evidence is not outside of an advocate’s field of expertise but is a fundamental part of the job. However, as this article will go on to argue, for practitioners dealing with expert evidence, training should be much more comprehensive than is currently being considered if advocates are truly to engage with the Rules and Practice Direction in a way that was envisaged by the Law Commission.

**Proposals for Detailed Training**

The concern expressed by the Law Commission (and many of the respondents to its Consultation Paper) was the tendency of counsel to cross-examine as to credit and the inability or unwillingness to address methodological flaws in cross-examination before jurors. The UK Register of Expert Witnesses65 noted in particular the sense among their expert respondents that “cross-examination barristers do not

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64 Above, n. 40
65 This Register is now closed.
necessarily problem test or challenge expert evidence for its basis in science or experience, but instead adopt the simpler approach of trying to undermine the expert’s credibility.” 83% of the UK Register of Expert Witnesses’ respondents felt that a non-expert advocate faced with an expert who is firm in his or her opinion will often try attacking the expert in place of attacking the opinion.66

The Forensic Institute added its view that there should be enhanced training for new judges and lawyers. Its Director stated, from his experience as an expert witness, “the questions of lawyers and barristers are just not penetrating enough” and yet:

“[t]hey are the one group of people who get to cross-examine forensic experts, and ask them how they arrived at their conclusions... [I]t is only necessary that the challenger has a knowledge of science, although knowledge of the specific discipline is advantageous.” 67

Care must also be taken to ensure that when cross-examination properly moves away solely from issues of credibility it does not simply become an unjustified attack on the science. A balance must be struck. As the Lord Chief Justice commented:

“With increasingly complex or novel science there comes the risk of testing the science, rather than the evidence, in front of the jury. This in turns risks undermining juries' and public confidence in forensic science, with highly undesirable consequences, resulting either in less use of forensic evidence, or less use of juries. So there is a challenge for all of us – advocates and judges – to manage the presentation and testing of forensic evidence in such a way as to avoid fatally undermining confidence.”68

66 Law Commission, Expert Evidence in Criminal Proceedings in England and Wales (Law Com Consultation No 190, 2009) Summary of Responses to Consultation at 164
67 Ibid. at 1.526
68 Above, n.6 at 6
So, what is it that advocates should be cross-examining about and how can we train them to do this? To what extent is it really necessary for advocates to be well versed in scientific methodology in order to cross-examine expert witnesses? To what extent can advocates simply conclude that ‘the expert knows best’? The National Research Council (NRC of the US National Academy of Sciences (NAS)), concluded that:

“With the exception of nuclear DNA analysis ... no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source.... The simple reality is that the interpretation of forensic evidence is not always based on scientific studies to determine its validity. This is a serious problem. Although research has been done in some disciplines, there is a notable dearth of peer-reviewed, published studies establishing the scientific bases and validity of many forensic methods.”

The NRC report was referenced in two Court of Appeal cases in recent years demonstrating that the issues it highlights are not confined to the US. Traditionally English Courts have had some of the most liberal admissibility practices amongst the common law jurisdictions. In line with the authors’ own research findings in relation to knowledge and use of the Practice Direction, Edmond proposes that in reality “relatively few of the findings expressed in the NRC and other reports appear to be (well) known to English law”. Whilst the development of CrimPD19A represents a clear step in the right direction, without the right training, the rule changes alone cannot address the key problems identified by the Law Commission. The lack of training currently provided to advocates and judges means that many of

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69 A question considered in more detail by Carr, Piasecki, Tulley and Wilson, “‘Opening the scientific expert’s black box: ‘critical trust’ as a reformatory principle in criminal evidence”, forthcoming.
73 ibid. at 5
the difficulties in relation to the admission of expert evidence remain. As the Lord Chief Justice made plain “the one significant issue that the proper use of the Rules and Practice Direction faces is the failure of practitioners to use and refer to them”. He continued ‘It is therefore now impossible to see how any advocate can be regarded as competent to practice in the criminal courts unless he is familiar with the content of the Criminal Procedure Rules and Practice Direction’.74

It is still unclear whether CrimPD19A.4 by stating with reference to the decision of the Court of Appeal in Dlugosz that evidence must have a “sufficiently reliable scientific basis” was intended to introduce a discrete fourth limb of the common law admissibility test or whether the guidance in CrimPD19A on reliability is to be taken into account when determining the three traditional limbs of assistance, expertise and impartiality. Jackson and Stockdale considered the jurisprudence of the Court of Appeal and suggest:

“Examination of the jurisprudence of the Court of Appeal in combination with the fact that the Law Commission had envisaged that the guidance now embodied in CrimPD 19A would operate alongside a distinct reliability limb and the Lord Chief Justice’s view expressed in his lecture that the common law now encompasses a requirement that expert opinion evidence can only be admitted if it is reliable, suggests that the Court of Appeal is likely in future to treat sufficiency of reliability as a discrete admissibility condition to which the guidance in CrimPD 19A is applicable.”75

Whether reliability forms a new fourth limb or not, what is clear, is that the Rules and Practice Direction introduced formally, for the first time, guidance on how to apply the test of reliability as introduced in case law. However, as reliability is not further defined a test of reliability is still the domain of the common law.76 There is a real risk that without significant training, even with the PD19A.5 and 19A.6 factors

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75 See Jackson and Stockdale, above n.39
the question of reliability will be approached in the same way that it always has been. Indeed it may be that counsel will continue to focus on the easy targets of expert witness competence and bias rather than delving into the more challenging issue of reliability of expert methodologies or techniques.

Even where the issue of the reliability of expert evidence is raised, traditionally whether a technique is reliable tends to be assessed only on whether the technique is grounded in mainstream science and not at the actual validity of the technique itself.\(^{77}\) Assessing the validity of a technique should require consideration of whether sufficient research has been undertaken to make a credible assessment of whether it works, how well and in what conditions.\(^{78}\) When advocates fail to do this and concentrate only on whether the technique is known they do little to direct attention to the scientific understanding of reliability and instead focus on “a peculiar legal construction [of reliability] that excuses the failure to have undertaken appropriate research and testing because of the confidence vested in adversarial forensic techniques.”\(^{79}\) There is a string of English case law examples prior to the introduction of the Practice Direction, which demonstrate how weak the reliability requirement has been in practice\(^{80}\) and a failure to deal properly with reliability means there is a risk the jury will demonstrate unjustified deference in respect of core aspects of their task.\(^{81}\)

Edmond argues cogently that:

“Legal reliability is closely aligned with bare relevance (i.e. the opinion seems probative) and proxies such as the existence of a field, the analyst's training, study or experience, and perceived assistance or need. Generally, courts have

\(^{78}\) See Edmond, above, n. 72 at 11
\(^{79}\) Above n. 72 at 12
been unreceptive to the need for evidence of validity and reliability. Ordinarily, to the extent that they are addressed, issues of validity and reliability are to be resolved through the trial (via cross-examination, rebuttal witnesses and judicial guidance) and in exceptional cases through the application of PACE s.78.”

Liberal admission of expert evidence was based upon the concept that the adversarial trial will provide the appropriate forum for scrutinising and evaluating expert evidence. The belief was that good cross-examination will highlight comprehensively weaknesses in the evidence which can then be assessed through the burden and standard of proof. This is highlighted to best effect in Atkins where it was specifically stated that the methodological limitations with facial mapping evidence were issues for trial:

“The absence of a statistical database is something which will undoubtedly be exposed in cross-examination. The witness may expect to be asked to explain how, if no-one knows how often ears or noses of the shape relied upon appear in the population at large, it is possible to say anything at all about the significance of the match; his answers may be satisfactory or unsatisfactory but will be there to be evaluated by the jury, which will have been reminded by the judge that any expert's expression of opinion is that and no more and does not mean that he is necessarily right. Similarly, the expert may be expected to be tested upon the extent to which he has not only looked for similarities, but has actively sought out dissimilarities. Those are but the simplest of the questions which plainly need to be asked of anyone offering evidence of this kind. Cross examination will also be informed by the fullest disclosure of his method, generally, and of his working notes in the particular case being tried.”

82 Above n. 48 at 14
83 n.48 at 50
84 R v. Atkins and Atkins [2009] EWCA Crim 1876 at 28
In reality, some of these basic questions were not dealt with at trial. If the case of Atkins had been heard after the implementation of the Practice Direction Counsel should have had regard to PD19A.5 and 19A.6 and this may have helped to identify some of the issues raised above. However, the Practice Direction can only be of use if an advocate fully understands that, for example, in assessing validity of the method used (highlighted in PD19A.5(a)) an expert should be able to ascertain the error rate and level of uncertainty associated with a specific technique. It is argued that reference to the Practice Direction alone is unlikely to ensure an advocate is able to identify the right issues or formulate the right questions without further training. To be able to understand and apply the Practice Direction training needs to, as a minimum, help advocates:

- understand the importance of validation studies
- understand probative value through ascertaining the error rate and level of uncertainty associated with a specific technique
- understand the limits of expertise and/or proficiency
- know how to find the standards or protocols that should have been complied with
- ensure the way an expert expresses his opinion is actually consistent with the results of the validation studies
- identify potential contextual bias
- understand whether the expert has shown how their results can be verified
- know how to look for multidisciplinary perspectives particularly when dealing with an expert from a small scientifically marginal or emerging field
- ensure any expert report or testimony is transparent and comprehensive

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87 For a detailed discussion of these areas see Gary Edmond, “Legal versus non-legal approaches to forensic science evidence” E. & P. 2016, 20(1), 3-28 at [20 – 22]
Whilst the Practice Direction is designed to help advocates move away from attacking only an expert’s CV to actually addressing the key issues of reliability it is argued that advocates need training to be able to fully understand and implement the guidance provided by 19A.5 and 19A.6 so that they appreciate, for example, the types of validation studies that should be available and, ideally, included in the expert’s report. They need to be able to understand how to evaluate whether the expert has the actual expertise to do the specific task on which his opinion is based. This is increasingly important in light of the de-skilling of many forensic scientists as the age of austerity takes its full grip on the criminal justice system.

As has been demonstrated above this sort of training is currently not available. Without it the Rules and the Practice Direction are a blunt tool which are capable of driving a limited amount of change in how expert evidence is dealt with on a day to day basis. Ultimately, if the judge and advocates do not ensure that the jury know whether an expert can do what they say they can and/or how well they can do it the expert’s opinion may potentially mislead the court, usually to the detriment of the Defendant. It is accepted that judges and advocates may often deal with expert evidence in an exemplary way. Without the introduction of systematic training throughout the profession, however, there is a significant risk that the adversarial system is not consistently identifying and clearly demonstrating the limitations of expert evidence to the court. This cannot be a satisfactory position. The Law Commission ultimately chose to place significant confidence in quite limited training which in reality is unlikely to address such longstanding problems with expert evidence.

89 Whilst Crim PR 19.4(h) require an expert’s report to include “such information as the court may need to decide whether the expert’s opinion is sufficiently reliable to be admissible as evidence” it is unclear whether this will be interpreted to include validation studies.
91 Above, n. 48 at 40
Even when the Practice Direction criteria have been used to assist the court to determine admissibility at common law and the court has ruled such evidence to be admissible, counsel will still be entitled to challenge the weight of such evidence before the jury and the jury will need to understand the evidence, how it should be used to inform their decision-making and the factors which may contribute to their assessment of its evidential weight. The Practice Direction gives no guidance as to how evidence should be presented to the jury once admitted but training will equip advocates and the judiciary with the skills needed to ensure evidence is correctly presented. For example, it would be wrong to allow the jury to apply any weight it wants to the evidence if there are validation studies and indicative error rates which can demonstrate how much weight can legitimately be given to a piece of evidence. Poor presentation of evidence in court can be very damaging. If the jury cannot appreciate the limitations of a technique relied upon by a prosecution expert or if appropriate terminology is used then the benefit the defendant has via the criminal standard of proof beyond reasonable doubt may be lost.

Edmond, Martire, Kemp and others considered within the Australian context how lawyers should approach the cross-examination of expert witnesses with specific focus on forensic scientists. They concluded that the primary failing of lawyers when cross-examining experts is their inability to deal with validity and reliability. Too often lawyers deal with “legal admissibility heuristics” such as field, qualifications, experience, common knowledge, previous rejection of the witness’ evidence etc. Concentrating on attacking the CV of the witness at the expense of validity and reliability means that the jury are deprived of the information they really need; understanding of actual ability and accuracy of the evidence presented.

“Too often, issues central to the assessment of scientific validity and reliability (and therefore probative value) have been circumvented by

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92 Above, n.32 at [941]
94 ibid. at 174
recourse to experience, formal qualifications, previous appearances in legal proceedings, previous involvement in investigations and convictions, the practice or jurisprudence in other jurisdictions, and the institutional practices and polices of police forces and forensic science institutions. These substituted factors may not however, provide actual evidence for the validity and reliability of techniques and derivative opinions, for, they do not provide independent evidence, or an actual guarantee, that a technique or method has probative value.⁹⁵

In addition to understanding the scientific issues which underpin reliability advocates must also be able to ask the right questions in court. Edmond et al provide examples of cross-examination questions that deal with relevance and validation and consider how lawyers “can unpack whether or not the evidence can rationally influence the assessment of facts in issue”.⁹⁶ Specific advocacy training is vital for all defence and prosecution advocates. The current training and CPD regime for the Bar do not prepare practitioners to undertake such nuanced cross-examination. It is unrealistic to believe that this is a skill which will inherently be ‘picked-up’ along the way. Just as there is now an understanding that advocates must have extensive training in handling vulnerable witnesses, such training is also needed in relation to expert evidence and it is suggested that such training should be just as expansive and should also be mandatory.

**Conclusion**

Whist great trust has been placed on the adversarial system as a trial safeguard⁹⁷ a significant body of case law would suggest that this trust has been misplaced.⁹⁸ The case of Sally Clark perhaps most poignantly demonstrated the consequences for the

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⁹⁵ ibid. at pg 175  
⁹⁶ Above, n.93 at pg 177  
⁹⁷ Above, n.72 at pg 11  
victim of the miscarriage of justice of failure to deal adequately with expert evidence during a trial. The 2005 report ‘Forensic Science on Trial’ and the Law Commission’s 2011 Report clearly highlighted the “laissez faire” attitude of the Bar and the Judiciary to both the admissibility of expert evidence and the need for further training in respect of it. This article has attempted to demonstrate that it is now difficult to argue that any advocate can be regarded as competent to practice in the criminal courts of England and Wales unless he is at the most basic level familiar with the content of the Criminal Procedure Rules and Practice Direction in relation to expert evidence. A substantial cultural change to tackle the complacency first identified by the Select Committee in 2005 can only be achieved through training. Greater training for the legal profession has been advocated for over 10 years but we are yet to see any mandatory minimum level of training in this area. There is little evidence that in day to day practice much has changed since the Law Commission concluded that “expert evidence of doubtful reliability may be admitted too freely, challenged too weakly by the opposing advocates and be accepted too readily by the jury at the end of the trial.”

Whilst the Rules and new Practice Direction are an important and welcome initiative, the survey reported in this article provides a snapshot view of an unaltered approach to expert evidence in daily practice of courts across England and Wales. Although the Criminal Procedure Rule Committee will do all it can to encourage the use of the Rules and the Practice Direction and a proper understanding of them, it is plainly the responsibility of practitioners to put behind them the culture that addressing the validity and reliability of expert evidence is outside of their remit. There is evidence of a lack of engagement with the Rules and Practice Direction though the cause of this cannot be clearly ascertained. The almost complete absence of appeals in respect of these new provisions along with the results of the survey suggests that the Rules and Practice Direction may not be being applied appropriately. Urgent training is needed to ensure practitioners are aware of the Rules and have resources

99 n. 23 at 2.27
available to them to help understand CrimPD19 to ensure that they are able to fully address reliability when assessing admissibility and when presenting evidence to the court.

It is suggested that training should start at the BPTC stage. The fact that there is no requirement for students to be trained either in basic scientific methodology or statistics or in relation to the advocacy skills required to examine an expert is a flaw in the current training system for barristers. Whilst such training would need to be pitched at the right level and designed to fit within what is already a very intense programme, it is vital that we introduce emerging advocates to the challenges associated with expert evidence from the very start of their careers so that they understand that dealing with these issues is central to an advocate’s job and not an appendage to it to be considered at a later date. Such training during the BPTC, pupillage and practice will deliver the culture change required within the profession so that members of the Bar and Judiciary are required and motivated to engage and have the skills and knowledge base they need to do so. Unfortunately, this article has demonstrated that whilst some progress is being made the motivation and resources do not yet seem to be fully in place. There should be a similar impetus and resource allocation in relation to expert evidence as can currently be seen in relation to vulnerable witnesses.

It is now seems clear that reliability is central to the question of admissibility of expert evidence. However, there remains a real risk that without significant training, even with the PD19A.5 and 19A.6 factors, challenges to expert evidence will be approached by attacking whether the science is ‘mainstream’ or on the basis of the witnesses’ credibility. Both techniques fail to appropriately address validity and reliability. It is clear that whilst PD19A.5 and 19A.6 are incredibly helpful to direct the mind of the advocate, without more detailed training than currently considered the criteria cannot be fully understood. Without a significant increase of pace in terms of training and a greater engagement with the practical application of the Rules and Practice Direction, it appears unlikely that the Rule changes and Practice Direction will have the impact envisaged. Progress in relation to training has been remarkably and inextricably slow but the pace must increase if further miscarriages of justice are
to be avoided.

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Appendix 1

Figure 1, Criminal Practice Direction 19A.1

Figure 2, Criminal Practice Direction 19A.5

Figure 3, Criminal Practice Direction 19A.6