



Challenging expert evidence

Wednesday, 12 March 2025

Disclosure: This guide is for informational and educational purposes only and should not be considered legal advice. The content is designed to provide general insights and strategies but does not replace professional legal consultation.

CPD 25



Carly Marcs



**Molly
Deighton**

Agenda

- 01** Why does this matter?
- 02** Do I need to challenge?
- 03** Preparing to prepare
- 04** Preparation
- 05** Case studies
- 06** Questions

Why this matters?

- The privilege and the duty of criminal defence advocacy
- We are not scientists, and we don't need to be
- As long as we are **curious** and **prepared**

Carly's hero, Gary Edmund, in 2014:

“Perhaps the most important thing for lawyers and judges to know is that a good deal of forensic science and medicine evidence seems to lack scientific foundations. A surprisingly large proportion of techniques, standards, protocols and expressions have never been independently evaluated. We do not know if they work...For far too long fact-finders and judges have been deprived of this information and its serious and destabilizing implications for legal practice. The worthy goal of doing justice in the pursuit of truth is threatened by weak, speculative and unreliable opinions, especially where the opinions are presented by prosecutors as ‘expert’ and that imprimatur is reinforced by admission.”

What is forensic 'evidence'?

Cases where these issues may arise

- Drugs
 - Is it a drug? Purity?
 - Quantity - Have they only tested a sample and extrapolated?
- Serious injuries
 - Only medical records provided - Who is speaking to them?
 - VIFM statement needed?
- Driving
 - Crash reconstruction
 - Impairment statements

Cases where these issues may arise

- Telecommunications evidence
 - Only given CCRs – who is speaking to them?
 - Maps
 - Current issue with Optus records
- ID evidence
 - DNA and fingerprints
- Coronial jurisdiction
 - Multiple experts needed



“An expert is one who knows more and more about less and less until he knows absolutely everything about nothing.” — Nicholas Butler

Section 79 - Evidence Act 2008

(1) If a person has specialised knowledge based on the person’s training, study or experience, the opinion rule does not apply to evidence of an opinion of that person that is wholly or substantially based on that knowledge.

Do I need to challenge?

- What is the prosecution case theory?
- What are my instructions?
- What is my **RAT** – **Rival Alternate Theory**?
- What findings / concessions do I need to support my RAT?
- Do I *need* to challenge the expert's findings?



Do I need to challenge?

- Expert evidence, like any evidence, needs to make sense and be understandable
- Put yourself in the fact-finder's role
- If a jury can't understand the expert evidence, what is its utility / relevance?
- Don't try to perfect the prosecution case, but put it to proof

Preparing to prepare Step 1: Gather materials

- What do I have?
- What's missing?
- Why is it missing?
- Can I get it?
- Disclosure!



Preparation Step 2: Read and understand

Every advocate is only as effective as their preparation.

- Closely read the report, the experts working notes and the letter of instruction.
- Quick literature review on the topic – look for recent peer reviewed journal articles, conference papers etc.
- Google any terms you don't understand. Create your own mini glossary.
- List of anything about the report that's unclear.

Preparation Step 3: Seek collateral information

- Speak to colleagues.
- Google expert, check out their LinkedIn profile, run their name through JADE to find other cases where they have given evidence.
- Based on your literature review – is there broad agreement within the scientific community or not?
- Can you get your own expert? Have a brief chat first to ascertain if the issue is within their area of expertise
- Confer with the prosecution expert. Remember, no property in witnesses.

Preparation Step 4: Choose your own adventure

What are the concerns? What do I need to challenge?

- Relevance – can the opinion rationally influence the assessment of facts in issue?
- Validation of technique - this is what establishes that the science does what it's supposed to
- Limitations and errors
- Verification
- Competence or proficiency of examiner / analyst / expert



Preparation Step 4: Choose your own adventure (continued)

What are the concerns? What do I need to challenge?

- Cognitive bias and Cross-contamination of evidence
- Continuity
- Possible contamination or obscuring of results due to decomposition / changes in environment
- Code of conduct



It's rarely all of the above – select strongest point(s)

Preparation Step 5: Cross-examination plan

- Always have a plan
- Don't get on your feet until you do
- XXN plan should have the concession you need at the top and the steps towards it
- Don't be afraid to ask questions you don't know the answers to when it comes to methodology or understanding of terminology
- Never accuse your expert of bias without a proper basis (*cautionary eg: Gavin Lennon*)
- Remember they are scientists; they should always concede possibilities
- Start nicely, save your ammunition.

Example: Competence of medical examiners

- Independence (VIFM)
- Thoroughness of their work
- Sources of information, facts upon which their opinion is based.
- Usual practice? Any deviation?
- Did they attend the scene and see everything in situ?
- Or just receive photos / items later?
- Time spent?
- Attention to detail? (eg: *close reading of hospital records*)
- Inaccuracies?



Example of *Stephen Moore* murder trial

- how the injuries on the accused at time of arrest supported our RAT and contradicted the prosecution case;
- meat cleaver injury supported client's instructions and his Rol about history of physical abuse with that implement.

Injuries to his hands supported client's instructions about being attacked with a knife.



Execution of this strategy

LAWYER: Doctor, I just want to take you to a part of that photograph immediately above the elbow and below the first bruise on the right-hand side of the arm. There's some dots. Do you see where I mean?

DOCTOR: M'mm.

LAWYER: Did you make a note of those?

DOCTOR: I'll just refer to my notes, to check. No, I don't think I made a note of those.

LAWYER: Looking at those, do they appear to be an injury to you?

DOCTOR: Okay. So, it's possible that that is - well, there's certainly a change there. And it's possible that it's, an injury.

LAWYER: Is it possible that that's a - that each of those small dots is a tiny abrasion?

DOCTOR: Yes, that's possible.

LAWYER: And could it possibly have been caused by something like a meat tenderiser?

DOCTOR: I would have to probably see the meat tenderiser that you're thinking of, to comment properly. But from what I understand a meat tenderiser to be, it's possible that it could cause that pattern.

HER HONOUR: Do you want the photo of the meat tenderiser - - -

LAWYER: Yes.

HER HONOUR: Pull it up?

LAWYER: Doctor, do you see that photograph?

DOCTOR: Yes, I do.

LAWYER: Comparing that to Photograph 70, do you have a view about whether the injury could have been caused by that implement?

DOCTOR: Ah, yes, it's possible that that implement could have caused those skin changes.

Case study 2: Fingerprints & cognitive bias

- Aggravated burglary & theft of motor vehicle
- Fingerprint on outside of the driver's side window
- Relied on for ID
- *“Consistent with individual sitting in the driver's seat...”*
- Disclosure!



Case study 3: MCIU – Culpable/ Driving cases

- Any supplementary report is often a



- Always be wary of “appreciable risk” type opinions
- EG 1: Impairment statements – why would a police investigator ever need to send case law to a VIFM expert? Answer: he shouldn’t!



Case study 3: MCIU – Culpable/ Driving cases

In relation to Culpable Driving where the prosecution proceeds under Sect 318 (d) of the Crimes Act they must prove at the time of the collision the accused drove “whilst under the influence of a drug to such an extent as to be incapable of having proper control”.

Where words such as, ‘capable’, ‘suggests’ or ‘may have’ are used in the opinion statement it leaves enough for reasonable doubt and the charge not being authorised. Stronger terms such as, ‘would have’, ‘shows’ or ‘did’ would alleviate this issue and strengthen the assertion that the accused was at the time of driving impaired.

There is a High Court decision which outlines what constitutes the phrase Dangerous. The case is King v Queen and the relevant paragraph which outlines what constitutes dangerous is paragraph 46:

...

This is best brought together in the High Court decision of Jiminez vs Queen at paragraph 13:

...

Case study 3: MCIU – Culpable/ Driving cases

What I am asking is given all of the information contained in your statement and taking into account the elements of Dangerous Driving Causing Death are you able to reach an opinion given the types and quantities of drugs in the toxicology sample provided by X that:

The level of drugs in X system are at a level where his driving on this occasion placed the public at a risk over above that ordinarily associated with the driving of a motor vehicle?

The reason for the further request is that if we proceeded with a charge of Dangerous Driving Causing Death without someone giving evidence in relation to the level of drug and what risk was involved, defence would make an application to have the drugs excluded on the basis that the prejudicial value of the mere presence of drugs outweighs the probative value.

In the absence of a statement such as yours, if you were able to form that opinion, it is highly likely that this application would be successful. I have personally been involved in two trials where this has happened.



Case study 3: MCIU – Culpable/ Driving cases

Compare first opinion:

While environmental and vehicular factors may have contributed to the crash, Ms H had a level of THC capable of causing impairment to a degree where she would not have been able to properly control a motor vehicle.


With the second:

I wish to replace the contents of paragraph 25 with the following:


Notwithstanding factors that may have contributed to the crash, a THC level of 12 ng/mL would have rendered Ms H incapable of having proper control of a vehicle.



Strongly recommended reading for beginners:
Gary Edmond (and others) 'How to cross-examine
forensic scientists: A guide for lawyers' (2014) 39
Australian Bar Review

 +61 3 9225 7000


 enquiries@parnellsbarristers.com.au

 Level 2, 550 Lonsdale Street,
Melbourne, VIC 3000


www.parnellsbarristers.com.au



Questions?

 +61 3 9225 7000

 enquiries@parnellsbarristers.com.au


 Level 2, 550 Lonsdale Street,
Melbourne, VIC 3000

www.parnellsbarristers.com.au


Disclosure: This guide is for informational and educational purposes only and should not be considered legal advice. The content is designed to provide general insights and strategies but does not replace professional legal consultation.



Thank you

 +61 3 9225 7000

 enquiries@parnellsbarristers.com.au

 Level 2, 550 Lonsdale Street,
Melbourne, VIC 3000

www.parnellsbarristers.com.au

Disclosure: This guide is for informational and educational purposes only and should not be considered legal advice. The content is designed to provide general insights and strategies but does not replace professional legal consultation.