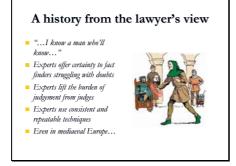


Dia 2



Dia 3

Experts Post Renaissance

A conflict of Experts from 1522

- The Church –rifles are the work of The Devil and are illegal
- Herman Moritz —rifles are the only firearms that do not do the work of The Devil



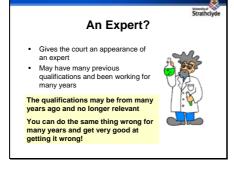
Dia 5

Determining Expertise

- Extensive qualifications in the field
 - Degree
 - Postgraduate qualifications
- Many years experience
- Demonstration of many years in their field

Dia 6





Dia 8

Professor Sir Roy Meadow

- Professor Sir Roy Meadow was highly qualified in the field of paediatrics
- He had many years of experience in the field and consider a leading expert
- He was well qualified in science but not in statistics and gave evidence, later criticised, leading to two miscarriages of justice

Dia 9

People v O. J. Simpson

- Many experts gave scientific evidence in the trial of O. J. Simpson
- The scientific testimony of many scientific 'experts' later criticised for lack of impartiality

 Much of the testimony was poor science and misleading to the jury



Strat

Competence

Strathch

- Qualifications give an indication of an ability at that point in time
- .
- Experience can be useful but not the best indicator of ability Competence can only be determined by assessing an expert against agreed standards
- Expert witnesses have to agree to be • assessed on a regular basis

Dia 11

Regulation

- If you attend a hospital you probably expect the person attending to you to be medical trained and to meet some standard in medicine
- General Medical Council So why is there no such regulation for those • purporting to the expert scientists

Addressed by the UK in 2001

Dia 12

Strathch Council for the Registration of Forensic Practitioners

- First regulatory body to monitor the standard of expert witnesses (UK only currently)
- A open to all who write reports for the court and who may give evidence •
- Practitioner based
- Registration indicates competence in a field
- Registration last 4 years only

www.crfp.org.uk

International Lists of Experts

St

- · Lists of approved experts exist
- · Approved by whom and on what basis
- Open to the problems of a club • Not an indication of competence and
- impartiality

Dia 14

Science, Witchcraft or Art

- When is a scientific test acceptable to the court? In the US there are Frye & Daubert hearing to determine admissibility – Can means a delay in acceptance of evidence – Handwing now an art not a science In the UK this is dependant upon the court •
- Once accepted then allowed in other courts of similar power
- · Few acceptable standards exist

Dia 15

Strathclyde Acceptance of DNA Profiling

- DNA 'Fingerprinting' first used in 1986 in a criminal case
- . Accepted by an English court with little challenge
- Original technique led to a number of convictions
- There have been number of appeals on the technology (Kelly v HMA), or the evaluation of the evidence (Adam v R & Doheny v R) •

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DNA has since been the subject of extensive validation and testing to be accepted in courts world wide. Questionable whether fingerprints would pass the same challenge

Dia 17

Earprints – A New Test

 Our ears are thought to be unique Ear prints occur when a person presses their ear against a window etc

Comparison is possible and has been used in a number of cases particularly in mainland Europe



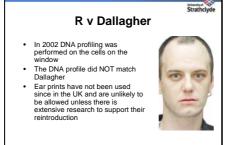
Dia 18



- In 1998 Mark Dallagher was convicted for the murder of 94 year old Dorothy Woods
 Ear print on a window crucial in the conviction
 Cornelis van der Lugt, an expert on ear prints from the Netherlands, stated he was 'absolutely convinced' an ear print from Dallagher matched that on the window



Strathclyd



Dia 20

Strathclyde

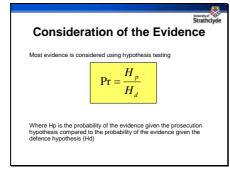
- Probabilities & Opinions
- The expert is at court to give an opinion
- Comment upon the strength of the evidence
- The court would like the scientist to be definitive
 - This glass came from this window
 This mark came from this shoe
- Most scientists are trained to give
 probabilistic reasoning
 - It is likely that this blood came from this person

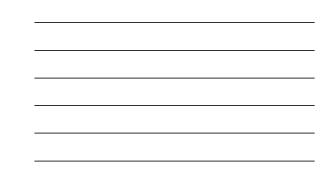
Dia 21

Some Evidence Types Considered to be Unique

- Fingerprints, toolmarks, bullet striations, & handwriting all thought to be unique
- Depends upon the amount of material available to examine and the number of points of comparison available
- Reported that no two fingerprints/bullets/sets of handwriting will make the same marks



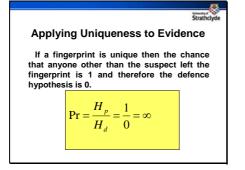




Applying Uniqueness to Evidence

If a fingerprint is unique then the chance that anyone other than the suspect left the fingerprint is 1 and therefore the defence hypothesis is 0.

Dia 24



DNA v Fingerprints

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- Uniqueness not assumed for DNA •
- The DNA scientist was not at the scene and did not see the event happen
- The DNA scientist must consider the possibility that the blood comes from someone other than the accused •
- The chance that anyone else has my fingerprint pattern is not considered •

Dia 26

Stra **Role of the Expert Witness**

The scientist should consider the source of any item and the activity associated with it. The Court considers the offence not the scientist Source (probability)

- The blood on the shoes of the suspect came from the victim
- Activity (opinion)
- The stain pattern on the shoe is that of kicking Offence (Court/judge/jury)
- The accused kicked the victim

Dia 27

Strathclyde Science in the Witness Box

- Expert testimony can have a major impact on a trial
 - The quality of the science needs to be assessed
 - The quality of the advocacy needs to be of a high standard
- There can be great benefit with high quality expert testimony
- There can be great problems with poor expert testimony

