

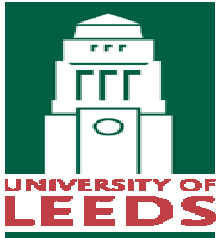
The Future of Forensic Bioinformatics



The
Nuffield
Foundation



Session Six – Evidence and Assessment



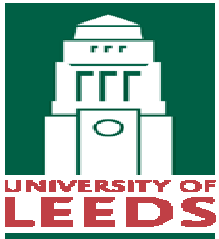
The effectiveness – and cost-effectiveness of the use of bioinformation in criminal investigations & prosecutions.



A review of issues and questions identified from the UK seminars informed by the presentations during Sessions Two and Three.

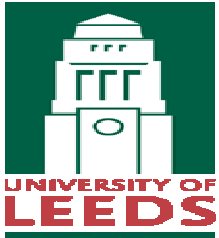


Evidence and Assessment



- There is increasing demand for more accurate and more meaningful data on the effective uses of FB in support of criminal justice objectives. Previous critiques by legislators and expert bodies of the quality of current UK data were underscored by the recent ruling in *S & Marper v. UK*.
- Whilst a number of police and other bodies are working to remedy this shortcoming, there is a need for a more general consideration of how to approach the production and evaluation of such data in the future.

Existing Official Data Sources and their Uses



- Scientific Support Unit Returns to Home Office



- NDNAD Annual Reports
- HMIC Thematics, Force & BCU Inspections
- 'DNA Expansion Programme: Reporting Achievement'

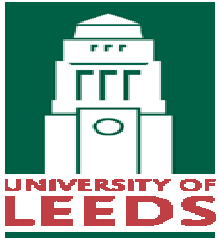


- 'Operation Advance'



- Answers to Parliamentary Questions
- Ident 1 Annual Report?/NPIA Website

Questions



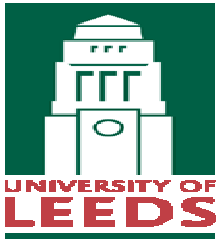
50. What national efforts should be made to collect what kind of standardised information from police forces about their use of forensic bioinformation?



51. Which agencies should be involved in designing relevant data collection instruments and in summarising and analysing the data collected?



Questions



52. What data and analysis should be provided by the custodians of forensic bioinformatics databases?



53. What data should be disseminated and in what ways?

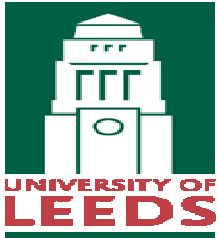


54. How adequate are current IT systems for the collection of existing and new data?



55. Is there any experience of 'future proofing' IT systems in order to deal with emerging data collection requirements?

Existing and Research Studies of the Use of Forensic Bioinformation



- Attrition Studies of Volume Crime
- Serious Crime Studies



- The 'Northampton Studies'



- Systematic Reviews & Randomised Control Trials

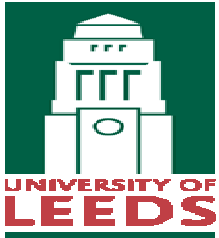


Existing and Research Studies of the Use of Forensic Bioinformation



- Observations
 - Heavily skewed towards volume crime
 - Over-emphasis on attendance & recovery stages
 - Unexplicated notion of ‘value to investigators’
 - Overemphasis on ‘first links’, unattentive to other uses
 - Use of unexplicated explanatory concepts
 - Absence of accumulation and dissemination

Questions



56. How should police agencies and independent researchers approach the development of new kinds of research into the uses of forensic bioinformation?



57. How should such research be funded and its results disseminated?

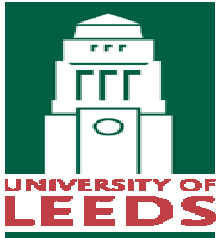


58. Are different methodologies required for research on serious crime on the one hand and volume crime on the other?



59. What lessons can be learned from research conducted outside the UK on this topic?

Questions



60. What research is available – in the UK & elsewhere - on the use of FB for the preparation of cases against individuals? How might any existing research be supplemented by new studies?



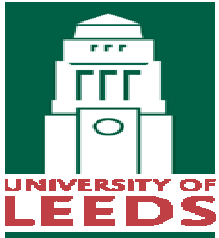
61. What studies exist of the uses & significance of bioinformation in court proceedings



62. How may we begin to understand the differing ways in adversarial & inquisitorial systems may approach the uses of FB evidence

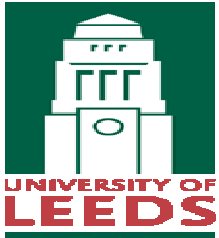


Cost-Effectiveness and Forensic Science Value



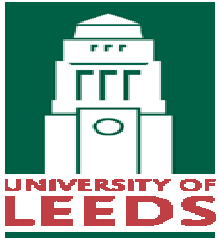
- Entering a period of unprecedented fiscal misery and scrutiny of claims by public service managers
- Forensic science is highly vulnerable unless its practitioners and researchers can demonstrate that it is ‘essential’ and not ‘a desirable addition’

Cost-Effectiveness and Forensic Science Value



- Difficulty with this dialogue is that information is imperfect and the methodology (e.g. CBA) too crude to imagine and analyse a complex reality
- Disengagement not an option: may need to challenge accountants/economists on their own ground and create own domain for the deliberation of these issues

Questions



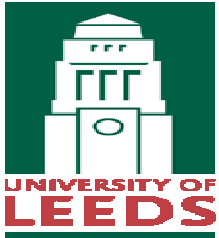
63. Are the caveats identified in UK studies and discussions to date relevant to similar studies in other countries?



64. Are there other caveats that should be taken into account by those undertaking value for money studies?



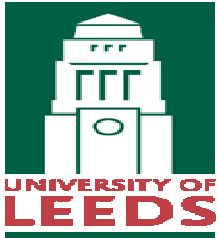
Questions



65. Should forensic science users, providers and experts engage with those responsible to ensure that problems of application, data gathering, veracity and reliability are properly acknowledged, or alternatively take the initiative by themselves developing appropriate measures and promoting research in this field?

66. Should the problem of dispersed geographical benefits be addressed by undertaking international studies?

Questions



67. Is there a case for an independent body within the criminal justice system to provide improved governance and ensure greater transparency over data sources, research and value for money evaluation?



68. Are there any models for such a body within other jurisdictions?



Questions



69. Irrespective of organisational change, can other agencies, such as the CPS, be encouraged to contribute information needed for research and evaluation into policing and forensic science when such studies are not seen as central to their own objectives?