

**Submission to the Senate
Legal and Constitutional Committee Inquiry into the
Commonwealth Crimes Amendment (Forensic Procedures) Bill 2000**

Justice Action

Justice Action is a NSW community based criminal justice and prisoners advocacy group who seek to raise awareness of the inadequacies and failings of the criminal justice system while promoting and undertaking constructive measures to address the dual problems of crime and imprisonment in our society.

Justice Action receives no government funding, relying on the voluntary efforts of ex-prisoners, academics, lawyers, students, victims of crime, those with family or loved ones in prison and other community activists. Its quarterly magazine, 'Framed', is subscribed to by lawyers, members of the judiciary, politicians, police, prison officers, criminologists, academics, community legal centres and activist organisations, both in Australia and overseas. 'Framed' is distributed free of charge in all NSW prisons.

Recent submissions made by JA to the Commonwealth have dealt with such issues as voting rights for prisoners, mandatory sentencing and the National Hepatitis C Strategy.

Justice Action has maintained a close interest in the development of laws and procedures governing the use of biotechnology in the criminal justice arena and has provided research, analysis and briefings on the topic to NSW parliamentarians, UTS & Griffith University law students, a Young Labor forum and a wide range of activist, academics and citizens (especially prisoners). We have also produced several articles about forensic DNA testing which have been published in various print and broadcast media.

Justice Action is currently developing advice pamphlets for prisoners and non-prisoners which will seek to address much of the misleading information which has been propagated about forensic DNA testing and the inadequacies of 'informed' consent as defined under the NSW Crimes (Forensic Procedures) Bill 2000 and proposed under the Commonwealth Crimes Amendment (Forensic Procedures) Bill 2000.

The Development of Australia's Forensic DNA laws

The past two decades has seen huge advances in scientific knowledge of genetics, a process set to accelerate with the recent completion of the Human Genome Project. Not only lawmakers, but doctors, ethicists, criminologists, theologians and genetic scientists themselves have struggled to keep pace with developments in the field and the implications they will have for the way we live and even how we think of ourselves.

Perhaps the earliest attempt by an Australian legislator to address the revolution being wrought by the new technology was that of the Australian Democrat Senator and qualified geneticist Dr John Coulter in 1989 to protect Australia's flora, fauna and people from the patenting and commercial exploitation of sections of their own genomes. His proposed amendments to the Patents Act were defeated prompting him to remark "*Neither Labor nor Coalition Senators would support these amendments either in Committee or when the Bill came before the Senate. They could see no difference between patenting a new carburettor or a gene.*". Perhaps some Australians have already shared the fate of US leukaemia sufferer John Moore whose spleen was used without his knowledge by a University of California physician to develop and patent a permanent cell-line, since licenced by Sandoz Pharmaceuticals and The Genetics Institute ("Second Thoughts about US patent #4,438,032" by B. Burrows, 'Bulletin of Medical Ethics 124', 1996).

The rapid adoption of Alec Jeffrey's application of DNA paternity testing to criminal investigation by US and UK law enforcement agencies and their promotion in Australia led the Standing Committee of Attorneys General in 1994 to begin the development of a legislative model for the collection, testing, storage and use as evidence of forensic material. This resulted in the 1995 and 2000 versions of the Model Forensics Procedures Bill which Australian legislatures have cited as the basis of their own bills. However these bills differ from each other and the Model Bill(s) in several respects, especially regarding the 'destruction' of forensic material and the data obtained from it.

One result has been the steady erosion of the protection the bodily integrity of Australian citizens from the state, previously guaranteed under common law 'assault' and 'trespass against the person' provisions. In combination with the new technology this has created the potential for breaches of privacy on a scale unimaginable only a few decades ago. It is to be hoped that this does not represent a new preparedness by society to accept as normal the retreat of legal rights in the face of technological advances. One wonders what might have resulted had such a situation existed in the 1940s and 50s when Sodium Pentothal was widely considered an effective 'truth drug', or last century when phrenologists claimed to have been able to tell a person's dispositions, including inclination to crime, by feeling the shape of their skull. It is also worth noting that the 'science' of psychological 'criminal profiling' is gaining increasing acceptance among US and Australian police, including the eugenically based 'racial profiling' of suspects.

Another development has been the increased emphasis on forensic evidence in criminal investigations and proceedings. Forensic science has long enjoyed a credibility in Australian courtrooms well beyond its theoretical limits or the competence of its practitioners, as cases from Colin Campbell Ross to Lindy Chamberlain have amply demonstrated. It is to be hoped that the 'million to one' certainties claimed by forensic

experts don't come to supplant the proper consideration of diverse evidence in this country's investigations and prosecutions.

Although short notice and legislative long windedness has not allowed Justice Action to do a thorough analysis of this bill, we note that it shares many of the shortcomings of its NSW counterpart. Following is a brief analysis of some of the more serious of these.

Justice Action also notes that the Commonwealth legislation places more responsibility upon police and magistrates to justify the ordering of a forensic test than will be the case in NSW. We complement the drafters of the bill for these provisions, which will reduce the number of spurious or trivial tests performed under the Act and help to avoid the US experience of rampant overtesting and massive test backlogs which led to the US Justice Department's 1998 "Inquiry Into the Future of DNA Evidence".

Shortcomings of the Crimes Amendment (Forensic Procedures) Bill 2000

Destruction of forensic material and data

Like the Model 2000 Bill, the Crimes Amendment (Forensic Procedures) Bill 2000 maintains the fiction that to destroy the 'identifying information' which might link a donor to a profile is equivalent to destroying the data. It is more akin to the police keeping an exonerated suspect's mugshot while erasing his name and claiming to have thereby destroyed the file.

DNA profiles *are* identifying information. That is generally why they are collected (duh-oh).

While the legislation seeks to wash its hands of responsibility for this data once the subject's name has been removed it is easy to see how a database of crime suspects profiles might be abused without the need of identifying names, especially in the era of 'Home DNA Collection Kits' already being marketed in the US. An employment medical check might include a quick DNA test and lookup to see whether the applicant has ever been a suspect in a police investigation using DNA evidence. Private investigators might use such data in conjunction with a 'home test' of a cigarette butt or material from a hairbrush to 'get the dirt' on the subject of a civil action, insurance claim or security check.

Pharmaceutical companies also place high value on this data. In 1998 US company Decode paid US\$200 million for the database containing the DNA profiles of around 250,000 Icelanders, around US\$800 per profile. The Lifecodes company sells a reference database with its DNA laboratory 'starter kit'. The profiles on the database are derived largely from the samples tested by Lifecodes for US law enforcement agencies. None of this valuable data harvested from unwitting citizens contains 'identifying information'.

Even more disturbing is that unlike the Model Bill, the Commonwealth proposal extends this inadequate definition of 'destruction' to forensic material itself. We are being asked to accept that laboratories no longer have our tissue sample if they simply erase the name on the slide. Apparently the lab or agency will then be free to do as they please with our genetic material or the millions of duplicates made using PCR technology.

The Crimes Amendment (Forensic Procedures) Bill 2000 not only fails to protect the privacy of the subjects of forensic DNA testing, it sets the stage for the 'pharming' of the genome of Australian citizens by corporations who seek to exploit the weaknesses of our Patents Act.

The penalties for improper use of forensic material (23YDAD) only apply if the resulting data is intended to be included on the index of a DNA database system, meaning that there is apparently no crime in deliberately diverting such material for pharmaceutical research or patenting. It is difficult to understand how a such a series of loopholes enabling the transfer of forensic data to private enterprise could have arisen purely by chance.

It is not necessary to retain the profiles of individuals in order to gather the data used by population geneticists in generation of match odds. This information can be maintained in statistical form which would prevent the 'unpacking' of an individual profile from the data. Why is this not being done?

The bill should be amended to ensure that destruction of forensic data includes the destruction of all records and data capable of being linked to the individual test. This would include name, gender, address, ethnic background, time and circumstances of the test and the profile itself.

Destruction of forensic material should include all material taken from the subject, or which has been identified as belonging to a subject. *The contention on page 69 of the Bill's information package that "it is not feasible to require the destruction of all the microscopic forensic material taken from a person that inevitably remains on a laboratory bench" is entirely spurious as this level of lab hygiene is exactly what is required in modern DNA labs to prevent cross contamination of samples.* It was probably the failure to destroy such material on a lab bench which caused the errors at New Zealand's ESR laboratories which resulted in a 3 month police investigation of an assault victim for double murder and, ultimately, the NZ Justice Department's Eichelbaum-Scott Inquiry into mistakes at the lab.

Informed Consent is misinformed

Inquiries to Justice Action regarding DNA matters regularly express the opinion that the innocent have nothing to fear from DNA testing, testimony to the effectiveness of the

proponents of this new 'error free' science. When accredited US DNA labs are subject to *notified* external testing they return an error rate of around 1%, mostly false positives which would favour the prosecution had they been real tests. If the Christchurch man falsely implicated in two murders by shonky DNA tests at ESR laboratories did not have an airtight alibi he would have been facing an expert witness in court who would have claimed that the chances of another person randomly matching the samples taken from the crime scenes was 1 in 750 million (the match odds given by ESR labs and disputed on mathematical grounds by reknown geneticist Dr Bruce Weir during the Eichelbaum-Scott Inquiry).

For this reason it is important that the information given before seeking consent to DNA testing should include the fact that forensic DNA testing is not foolproof and may implicate someone in a crime with which they have no involvement.

DNA tests not only reveal information about the subject tested, but also about family members. There have already been several instances in Australia and overseas where police have built up the DNA profile of an absent subject by testing close family members (e.g. estranged wife and children).

Requests for consent to DNA testing should also include the fact that the tests might be used for the investigation of family members or in evidence against family members.

What is often forgotten is that forensic DNA identification is an attempt to adapt paternity testing methods to criminal investigations. What it does more effectively than anything else is to determine parentage. Should an entire family be DNA tested, say as the result of a Wee Waa style mass testing, it would not be necessary to crossmatch a database or apply arcane population genetics formulas to determine whether the alleged 'father' of the group is the biological parent of all of his 'children'. It could be done with a glance at the resulting profiles. This is why those consenting to DNA testing need to be informed that it can be used to reveal details of family relationships of which the subject may be unaware.

Police are not always well informed about the laws they seek to enforce, nor are they always averse to misrepresenting these laws. If a subject whose consent is being sought for a forensic procedure is not subject to provisions which would make him/her liable to compulsory testing they should be explicitly informed of this.

Lack of Independence and Oversight

The Model 2000, NSW and Commonwealth Bill all fail to ensure independent oversight of the procedures they seek to legalise. Despite the ease with which DNA evidence might be planted, the scope for errors in testing and analysis, the extremely sensitive nature of the information being gathered and the difficulties in interpreting in court the evidence

they produce, parliamentarians seem content to allow the professional bodies, or perhaps the marketplace itself, to take care of quality assurance and protect the rights of those subject to testing.

US and UK DNA laboratories must be accredited in order to perform forensic DNA tests and are independently audited at regular intervals to check their error rates. In the US these tests are 'notified', that is the lab is aware they are being tested and can be expected to take extra care. In the UK the tests are blind. It is vital that the error rate of testing laboratories be made known to courts in order for them to be able to properly evaluate the evidence they produce.

In the UK, forensic collection is done by non-police specialists who are separate to the investigating police. This vastly reduces the possibility that police may accidentally or otherwise contaminate crime scenes with their own DNA or that of a questioned suspect. Bob Carr has promised a similar service in NSW to replace the forensic laboratories which DPP chief Nick Cowdery QC has described as 'the worst in the world', but these promises are not enshrined in the legislation and can easily be revoked by a future government, assuming that they are honored in the first place.

Consideration should also be given to the establishment of an independent body of qualified specialists to determine which formulas used to generate match odds are to be accepted in Australian courts. US courts have heard match odds ranging from 1:24 to 1:600,000 based on differing modelling techniques applied to the same lab results.

The controversial science of population genetics has been shaken to its neo-Darwinian core by recent discoveries of natural DNA transfer between individuals and even between species via retroviral and other microbial vectors. It has even been discovered that cell nuclei can alter their own DNA code via reverse transcriptase reactions. The result has been a serious challenge to the fundamental assumptions upon which population genetics is based. This casts serious doubts on the methods currently used to calculate DNA profile match odds, doubts being energetically debated among geneticists and evolutionary scientists but strangely absent from our courtroom.

The Crimes Amendment (Forensic Procedures) Bill 2000 makes no allowance for independent monitoring of those charged with collecting, testing, analysing or storing of forensic evidence. Even the far from adequate NSW legislation provides for the Ombudsman to oversee police use of the new laws in their first 18 months of implementation and for the Standing Committee on Law and Justice to monitor the effect of the new laws.

It is legislative irresponsibility to make laws which allow a narrow group of specialists to access the most intimate and sensitive biological data of citizens in a manner which may

see them facing serious criminal charges without making explicit provision for the independent oversight of said specialists.

Conclusion

There are many more problems with the Crimes Amendment (Forensic Procedures) Bill 2000 than those touched on above, but the short notice for submissions makes it impossible to detail them all here. Among them are the way in which the legislation allows a police officer to use 'reasonable force' without warning in order to carry out a forensic procedure or prevent the destruction of forensic material which might occur should a suspect say, wash his hands. It is perhaps worth noting in this context the support given by NSW's Premier and Police Commissioner to a police officer recently convicted of assaulting a motorist in order to gain 'consent' for a forensic procedure.

Justice Action hopes that the Legal and Constitutional Committee will recommend against the passage of the legislation in its current form and ensure that future revisions of this legislation will be allowed more time for public scrutiny.

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