

'Racial Profiling': DNA Forensic Procedures and Indigenous People in Victoria

Greg Gardiner*

Introduction

Following the passage of DNA forensic procedures legislation across Australian jurisdictions in the last three years, Indigenous people in Australia now face new forms of potential over-representation in the country's criminal justice system.¹ The development of DNA profiling as a criminal investigative tool, the creation of DNA databases, and the establishment of DNA storage facilities across state and federal jurisdictions present Australia's Indigenous community with the prospect of heightened levels of contact with criminal justice authorities, in terms of police forces, court systems, and prisons, and potential losses in relation to genetic rights.

As these now, largely, embryonic forensic procedures and database systems develop (see Saul 2001; Kellie 2001; Green 2000; Griffith 2000), the scenario to unfold could well be one in which an Indigenous person in Australia is significantly more likely than a non-Indigenous person to be the subject of a DNA forensic procedure. Due to the rapid increase in the type of criminal offences covered by the definition of a 'forensic procedure offence' (see Meagher 2000; VPLRC 2004:161), Indigenous suspects and offenders could increasingly be either requested or ordered to provide DNA for forensic testing. The coupling of expanded definitions of 'forensic offences' with the routinisation of testing regimes would thus impinge on Indigenous people in a far greater way than on the non-Indigenous community.² Some recent data already suggests that this process is under way. At the heart of this developing scenario is the ongoing condition that Indigenous people face today; over-representation in relation to arrests and imprisonment for criminal offences in every jurisdiction in Australia (RCADIC 1991; Gardiner 2001; Jonas 2001; SCRGSP 2003).

This article is concerned with the potential impacts of the new DNA forensic procedures regime on Indigenous people, with a particular focus on Victoria, following the passage of the Victorian *Crimes (DNA Database) Act 2002* (VIC), which amended the *Crimes Act 1958* (VIC). As this paper will show, there are significant advantages that will flow from the new regime to Indigenous people, in terms of reducing serious crime, and the

* Dr Greg Gardiner is a Senior Research Officer in the Parliamentary Library, Parliament of Victoria. Email: <gregory.gardiner@parliament.vic.gov.au>.

¹ See list of relevant legislation under Statutes at the end of this article.

² In this article the words Indigenous people define both Aboriginal and Torres Strait Islander people.

exculpation of innocent suspects. As most commentators recognise, DNA profiling represents a powerful tool for criminal investigations, with significant potential to assist in the identification of offenders, and the resolution of unsolved crime. However, a variety of contentious issues have also been raised, in general, in relation to the DNA testing of suspects, convicted offenders and prisoners (see Gans 2001; *The Age* 2002; Chappell & Ede 2002; Heasley 2002; Saul 2001; Insight 2001; Gibson 1998; VPLRC 2004; ALRC 2003; Independent Review 2003). This article does not attempt to cover all the issues surrounding the new DNA regimes, but instead focuses on those matters of particular relevance to Indigenous people in Victoria. The key issues addressed are as follows:

- the over-representation of Indigenous Victorians on DNA profile databases;
- the retention of Indigenous genetic material in DNA sample storage facilities;
- specific impacts on Indigenous juveniles;
- the impact of DNA procedures;
- the role of race/ethnicity in the construction of population databases;
- the benefits for Indigenous people.

Background

The Crimes Act 1958 (VIC)

The *Crimes (DNA Database) Act 2002 (VIC)* provides for Victorian participation in the national DNA database system, and incorporates key components of the Model Forensic Procedures Bill 2000, developed by the Model Criminal Code Officers Committee over the course of the 1990s. The *Crimes (DNA Database) Act 2002 (VIC)* is the latest in a series of amending Acts to the *Crimes Act 1958 (VIC)* concerned with forensic procedures, passed over the previous fourteen years. There are five major areas covered by the new Act: The self-administration of mouth swabs (s464Z); provisions for orders, (and notices) to attend for DNA testing on certain convicted offenders not in custody (s464ZF); retention of samples through application to court of hearing (s464ZFB); provisions for participation in the national database scheme (s464ZGG–s464ZGO); and, new forensic sample offences (Schedule 8).

Victoria was the first state to enact comprehensive legislation in relation to forensic procedures. Beginning with the *Crimes (Blood Samples) Act 1989 (VIC)*, successive amendments to the *Crimes Act 1958 (VIC)* have established and expanded the regime for DNA profiling of suspects and offenders in Victoria (see Meagher 2000). Meagher (2000) argues many of the provisions in the Victorian legislation raise questions concerning the common law rights of suspects and offenders, matters that have been raised concerning the impact of such forensic procedures law in other jurisdictions (see Saul 2001).

Key provisions of the *Crimes Act 1958 (VIC)*, s464, that have the potential to impact on Victoria's Indigenous population are as follows:

- Children as young as 10 years old can be compelled to undergo a forensic procedure (s464U);
- Convicted 'forensic sample' offenders can be forced to undertake a forensic procedure regardless of whether they are serving time for that offence or not, regardless of whether they are in custody or not, and regardless of when the 'forensic sample' offence took place (s464ZF);

- Police are empowered to employ '*reasonable force*' if necessary to assist the sampling procedure (s464ZA);
- The sample and DNA profile of a suspect can be held for up to 12 months, regardless of the state of the criminal investigation (s464ZG);
- Both the samples and DNA profiles of offenders are held in perpetuity, while the profiles of suspects are also retained in perpetuity with identifiers removed³ (see s464ZFB, s464ZFD, s464ZG, s464ZGA, and s464ZGJ);
- Section 464ZFB also allows for the retention of samples taken from suspects during an investigation who are subsequently found guilty of the relevant offence, or '*any other offence in respect of which evidence obtained as a result of the forensic procedure had probative value*';
- Schedule 8 of the Act defines a wide range of crimes as 'forensic sample offences' such as: crimes against the person — sexual, and non-sexual; certain property offences; some drug offences; criminal damage offences; arson and contamination of goods offences; offences connected with explosive substances, or bomb hoaxes; and, the common law offence of false imprisonment;
- Participation in the national DNA database system will mean that the profiles of Indigenous suspects and offenders in Victoria will be open to matching across a range of permissible profile matches in other jurisdictions (s464ZGI).

The *Crimes (DNA Database) Act 2002* makes no reference to Indigenous suspects or offenders, nor do the relevant parts of the principal Act (see section 464). However, s464C provides for the right of a person in custody to communicate with a friend or relative, and with a lawyer.

In 2004 the government passed the *Crimes (Amendment) Act 2004 (VIC)* which provided for the first time in Victoria the power for police to order a non-intimate forensic procedure on a custodial suspect, where a suspect refuses to consent to the procedure. The new provisions do not apply to juveniles. This most recent change to the Act does bring Victoria into line with other jurisdictions, but also dispenses with a process that was viewed as a success. In its final report the Victorian Parliament Law Reform Committee (2004:213-30) found that there was general agreement that the Victorian court based order system was working well, and concluded that judicial supervision of the sampling of suspects provided a buffer between the suspect and the law enforcement agency.

DNA forensic procedures Acts in other jurisdictions (NSW *Crimes (Forensic Procedures) Act 2000* and the Commonwealth's *Crimes Amendment (Forensic Procedures) Act 2001*) do have provisions specifically related to Indigenous people, which in various ways recognise the unique position of Indigenous people's relationship with the criminal justice system. Some of these provisions take into account recommendations of the Royal Commission into Aboriginal Deaths in Custody (RCADIC 1991); in particular, the importance of police services advising the relevant Aboriginal legal service that an Aboriginal person is in custody.⁴

3 The suspect profile is retained for use within the population database.

4 Under Victoria Police guidelines police are obliged to contact the Victorian Aboriginal Legal Service when any Indigenous person is taken into custody.

The Commonwealth Act has over a dozen sections that specifically refer to Indigenous people. These sections concern specific measures in relation to obtaining consent (s23WG) and the carrying out of procedures (s23WR). Unless waived, Indigenous suspects have a right to have an interview friend present when asked for consent, with some qualification (23WG(3)(c)). An Aboriginal legal service must be notified that consent is to be asked, and after the request the suspect must be able to communicate with the interview friend and legal representative.

The Commonwealth Act appears to be the only DNA forensic procedures Act to refer to the fact of Aboriginal culture, vis-à-vis customary beliefs, as such, and the necessity for both police and courts to take those beliefs into account in determining requests for orders, and the granting of orders (s23WI(3)(d); s23WO(3)(d); s23WT(3)(d)). An Indigenous suspect appearing before a magistrate must have an interview friend present, and can also be legally represented (but qualified at s23WX (4)). Indigenous suspects must have procedures completed within 2 hours (s23XGB). Under the Act both the police and the courts need to have a regard for whether the Indigenous person is at a disadvantage by comparison with the rest of the community in determining who shall be present when a request for consent is made (s23WG); who shall be present at a hearing (s23WX); and, who shall be present when a procedure is carried out (s23WR). These provisions recognise the issue of inherent Indigenous disadvantage in relation to the criminal justice system and its processes.

Over-Representation and DNA Profiling

It is now commonly understood that Indigenous people, particularly Indigenous youths and men, are significantly over-represented in their contact with the criminal justice system in comparison with the rest of the community (RCADIC 1991; HREOC 2003). Victoria is no exception. The relatively small Indigenous community in this state (just over 25,000 at the 2001 census) experiences very high levels of contact with police, courts, and prisons — there are literally thousands of processings of Indigenous people for offences each year.⁵ In particular, Indigenous men's rate of processing as offenders is very high. Indigenous men in Victoria are more than six times more likely to be arrested than non-Indigenous men, and have a rate of processing for offences of over 330 per 1,000 of population (see Gardiner 2001:65). In terms of incarceration Australia-wide, Indigenous people make up one in five of the entire prison population, while only just over 2% of the total population is Indigenous. In Victoria, an Indigenous person is more than 11 times more likely to be in prison than a non-Indigenous person (Gardiner 2001:9).

It is currently unknown what proportion of those convicted of 'forensic sample offences' in Victoria are Indigenous. However, due to the over-representation of Indigenous people in relation to the processing of alleged offenders for all offences, it would appear likely that DNA forensic procedures in Victoria are being carried out on members of the Indigenous community at a higher rate than the general community. Data from New South Wales would tend to support this proposition. Police forensic procedures statistics supplied to the author show that in terms of the testing of convicted offenders, almost 17% of NSW prisoners tested were Indigenous, a level of testing approximately in line with their proportion of the total prison population (NSW Police Service 2002). In terms of the general NSW population, these results indicate that overall an Indigenous person in New South Wales is many times more likely than a non-Indigenous person to be DNA tested, and thus more likely to have a DNA profile entered on the state DNA database. It is hard not to see Victoria following the same path of over-representation.⁶

5 Averaging 4,500 offences processed per year, see Gardiner 2001.

But does this matter? Since the Victoria Police's Victorian Forensic Science Centre (VFSC) does not use ethnicity or racial markers on any of its records, it could be argued that the size of the proportion of Indigenous profiles on the database is irrelevant. However, the first issue here is not that investigators are aware of the racial identity or ethnicity of the person from whom each profile has been derived, but rather whether there exists an inherent risk associated with having one's DNA profile permanently on that database. As Redmayne (1998) points out, because the report of a match between a crime scene profile and a suspect or offender profile does not provide conclusive proof of identity, any individual whose profile exists on a database bears a greater risk of mis-identification by chance than those not represented on the database. While the same level of risk of mis-identification by chance would presumably apply equally to any Indigenous or non-Indigenous person whose profile existed on the database, a much higher proportion of the Indigenous community would face this risk in comparison with the rest of the community. Randomised investigations using 'cold hit' methods — where crime scene profiles are matched with profiles of individuals not actually under suspicion — could also impinge on Indigenous Victorians to a greater degree than non-Indigenous Victorians. According to Saul (2001:84–85), the use of DNA databases for the purpose of 'cold hit' matches amounts to nothing less than speculative policing.

Because offender profiles are permanently maintained on the database, we also need to look at the cumulative effect this may have on the Indigenous community. From the available data, it can be reasonably estimated that fully one in three Indigenous men will be processed as an offender at some stage (see Hunter 2001:12; Gardiner 2001; SCRGSP 2003; Weatherburn, Lind & Hua 2003). While not all of these offenders will be processed for 'forensic sample' offences, it is clear that, over time, a very large part of the Indigenous male community will be represented on the database. This could have important ramifications for a community which has broad familial structures: As Evett et al (2000) show, family members have a higher probability of sharing the non-coded genetic material that provides the basis for a DNA profile: the closer the familial relationship, the higher the probability of a match. Victoria's DNA database could quickly become the repository for the combined 'profile' of large numbers of Koori families across the state; a situation that could make the non-offender relatives of offenders potential suspects even though they have committed no crime. In addition, while DNA profiles, based on non-coding DNA, currently provide little if any genetic information (Turbett 2001), this situation could change dramatically with advances in DNA technology (see Independent Review 2003:47). If racial/ethnic identity becomes a significant and knowable variant in profiling, the current use of non-racial, anonymous identifiers for DNA samples and profiles could become irrelevant.

However, recent advances in profiling techniques have significantly reduced the prospect of a false positive match, thus tempering one of the central disparities of a non-universal database system. What remains at stake for Indigenous Victorians though, is the sheer volume of Indigenous profiles that will be permanently entered and stored on the system. While the risk of a false positive match may be reduced, the sense of a community under constant suspicion is not.

As Kaye and Smith (2003) argue, in circumstances where minority groups are over-represented for arrests and convictions, databases that include individuals on the basis of conviction will tend to generate a racially skewed collection of DNA profiles (see also Peterson 2000:1227), a situation that creates its own outcomes. Indigenous people in

6 2,800 of Victoria's prisoners were reported by the media as DNA tested in 2002, see Heasley 2002.

Victoria are fully aware that they are over-represented in relation to their contact with the state's criminal justice system (see Victorian Department of Justice 2000). The extension of this over-representation into DNA databases (and sample storage facilities) could well exacerbate divisions between Indigenous and non-Indigenous communities, amplifying the system's racial disparities.

There are three key issues here. First, the permanence of profiles entered on the database: regardless of whether an offender is a recidivist, or merely a suspected recidivist, profiles are held permanently for the purpose of matching against crimes (past, present and future) for which the offender is not under investigation. The Victorian Parliament Law Reform Committee (2004:201) argued in its final report that since the chief rationale for the retention of DNA profiles on the database is the prospect of recidivism, a spent convictions provision should apply to all data-based offenders. The Committee recommended the spent convictions provision would apply to offenders convicted of an indictable offence with a sentence of two years or less, and following a period of ten years without further conviction, at which point the profile is removed from the database and destroyed.

The second issue concerns the scope of database use of a suspect's profile. The present system, which allows for the comparison of the suspect profile with the profiles of other unsolved crimes for period of up to 12 months, has been heavily criticised (see VPLRC 2004:235–52), principally on the grounds that the justification for including the profile on the database should be its utility for the investigation for which it was obtained. The Australian Law Reform Commission (2003) and others have advocated that a suspect's sample and profile be destroyed as soon as a suspect has been eliminated from suspicion.

The third issue concerns the type and range of offences classified as 'forensic sample offences'. There has been a gradual widening of the scope of offences listed under Schedule 8 of the Act for which a forensic procedure can be ordered (see Meagher 2000; VPLRC 2004:161). Describing the Victorian approach as ad hoc, the Victorian Parliament Law Reform Committee (2004:184) recommended that Victoria adopt the Commonwealth 'criterion' approach by re-defining forensic sample offences as serious indictable offences carrying a maximum penalty of five years imprisonment or more. This approach has its merits, but would involve the inclusion of 'Theft' offences currently not included in the Schedule. Given the high proportion of Indigenous alleged offenders processed for property crime, any extension of forensic sample offences to include theft would need to be treated with caution, particularly within a regime that currently lacks a spent convictions provision. Indeed, any expansion of offences defined as forensic sample offences to include lesser crimes, such as summary offences (as proposed by Victoria Police, see VPLRC 2004:168–70), would necessarily have a disproportionate impact on Indigenous offenders, who typically experience high rates of processing for summary and other lesser offences. Limiting the 'racial skew' of the database can therefore be assisted by reversing the trend of recent years, and capping the list of defined offences to serious indictable offences, so that only the profiles of Indigenous (and other) serious offenders are included.

While the introduction of such measures would not necessarily effect the ratio of the over-representation of Indigenous people on the database, it would likely reduce the rate of growth in the number of Indigenous offender profiles on the database, the types of Indigenous offenders included over time, and the number of matching exercises carried out involving Indigenous offender and suspect profiles. These generic measures would thus reduce the overall volume of Indigenous 'contacts' with the criminal justice system via its DNA regime than could otherwise be expected, and go some way in allaying Indigenous perceptions that the system was disproportionately targeting their community.

The DNA data-basing of serious offenders has undoubtedly produced significant results in terms of crime reduction, particularly in relation to the resolution of unsolved crimes, as the data tended by Victoria Police to the Victorian Inquiry attests (VPLRC 2004:180–83). However, some of the claims concerning data-basing's efficacy appear overstretched (see Moor 2002; AAP 2002; CrimTrac 2004). Following their study of the resolution of reported crime in the United States, Tracy & Morgan (2000:686) concluded that DNA databases will not be greatly successful in increasing the extent to which police can solve the majority of crimes. On the basis of both effective results and issues of genetic privacy, the authors concluded that the only DNA databases that appeared worthy of consideration were those confined to the retention of the profiles of specific serious offenders, such as serious violent offenders and sexual predators (Tracy & Morgan 2000:685–90, see also Saul 2001:92–95). While such a position may be deemed too narrow, it is the case that in Victoria the number of charges laid following DNA database detections represents only a fraction of the total number of crimes processed by police.

As a community that experiences high rates of serious crime victimisation, the Indigenous community will benefit from a database system that assists in the identification of serious offenders. However, the rights of the Indigenous community to the protection such a system can afford must be balanced by their rights to privacy. In this respect, it is important that the DNA database regime 'capture' only those Indigenous profiles that will actually expedite the resolution of crime. The regime should not be unnecessarily expanded to net Indigenous offenders of lesser or minor crimes on the basis of untested assertions concerning the links between minor and serious offending (see VPLRC 2004:174–77).⁷

An Indigenous Gene 'Bank'

The situation of Indigenous over-representation on the state's DNA database system will be replicated in the state's DNA sample storage facility. Over time, with the accumulation of samples taken from Indigenous offenders, the material stored will have a unique potential for mapping not just the genetic history of the individuals of that community, but of the community itself. In other words, with such a high percentage of the community processed and tested by the criminal justice system, that system will have in its possession a valid genetic profile for that whole community. As the Aboriginal and Torres Strait Islander Commissioner for Social Justice (HREOC 2002) has pointed out, such collections represent a potential opportunity for researchers in a host of areas, particularly given the unique status of Australian Indigenous peoples as a highly genetically diverse population. While current law appears to prevent the use of such material for purposes other than criminal investigations, concerns have been expressed in other jurisdictions, here and overseas, about the long term status and security of such systems. Kimmelman (2000) points to the retention of biological samples as always sustaining the possibility that samples may be disclosed because of security breaches or legislative amendments that would authorise disclosure (see also Meagher 2000; Saul 2001). 'Function creep' and the potential downstream research which utilises material held in forensic storage facilities and databases, could therefore adversely impact on the Indigenous community, raising issues of not just individual gene privacy, but group genetic privacy. As Kimmelman (2000) and others have shown, the retention of an offender DNA sample is also the retention of a part sample of the non-offender relatives of the offender. With Indigenous people and the new DNA regimes we are ineluctably in a situation in which individual rights cross over into familial and collective rights.

⁷ Data concerning Indigenous minor offending in Victoria would indicate that the majority of Indigenous minor offenders do not graduate to serious offending, see Gardner 2001.

Much of the general concern surrounding potential future usage of genetic material centres on the issue of purpose; a range of commentators and inquiries have expressed concern about the use of samples for purposes not intended or declared at the time of testing, and the development of new rules with retrospective application (see Independent Review 2003; VPLRC 2004). The Victorian Parliament Law Reform Committee's (VPLRC 2004:127) final report on forensic sampling recommended that the Act be amended to insert a 'purpose' clause to prevent the use of samples and profiles for purposes other than forensic purposes (an indication that the committee believed that the current legislation is not sufficiently explicit in this regard), and further recommended that the provisions of Subdivision 30A of the Act not have retrospective effect (VPLRC 2004:119).

The question of the collective genetic rights of Indigenous people is intimately tied to the issue of ownership, as Dodson (2000) argues. The international scientific community has shown an intense interest in the DNA of Indigenous communities, due in part to its highly differentiated and unique character. While agreements and protocols may be negotiated between Indigenous groups and parts of the scientific community over such projects as the Human Genome Diversity Project, Indigenous families in Victoria have no control over the status of the genetic material held in criminal justice storage facilities — bearing in mind that this genetic material is designated never to be destroyed. The capacity of future governments to utilize, turn-over or 'on-sell' genetic material to researchers, corporations, institutions, and other government agencies, or to re-use such material for other purposes not previously stated, is only limited by their capacity to amend legislation. The Victorian Parliament Law Reform Committee (2004:121–23) found that whilst the privacy regime as expressed in the *Information Privacy Act 2000* (VIC), and the *Health Records Act 2001* (VIC), covered 'genetic information', it did not cover 'genetic material', the use and collection of which was solely regulated by the *Crimes Act 1958* (Vic). In the absence of any general local constitutional protection of genetic rights, and by virtue of the fact that the provisions of the Act are not constitutionally entrenched, and can be changed by a simple majority, it's clear that the provisions that govern the collection and use of genetic material under the Act can be easily altered at a future date.⁸ Moreover, the Victorian Parliament Law Reform Committee (2004:123) found that the current provisions themselves do not adequately account for the quite different potential of the sample and the profile, a distinction that must be made if genetic material rights are to be protected.

As noted above, that such genetic material would be of interest to a range of researchers and research interests is undoubted. Pharmaceutical and other global companies have shown a keen interest in Indigenous DNA (HREOC 2002, see also Webb & Tranter 2001:171; Meagher 2000:85). It should be pointed out too that the absence of racial/ethnic identifiers on Indigenous DNA samples held in storage provides no protection from their future identification, or their use for such research purposes. Other issues of privacy, concerning employment, health status and identity are also associated with questions of access and disclosure.

Many European countries, such as Germany, Austria, Finland, Sweden, Denmark, and the Netherlands have recognised the inherent risks of such a storage system; their laws require destruction of all sample materials once the profile has been extracted (Jacot 2000). Some authorities have used the issue of cost and convenience to defend the ongoing retention of a person's sample. However, the recent Independent Review of Part 1D of the Commonwealth *Crimes Act 1914*, was not convinced that administrative issues should take

8 Indeed, the history of Victorian legislation in this area suggests that amendments to key areas of the Act will be made at some points in the future.

precedent. The Independent Review recommended that in relation to personal samples 'both destruction as well as de-identification' should take place immediately when statutory time limits expire (Independent Review 2003:108). In argument, the Review explained that the current practice of defining 'destruction' as de-identification 'does not offer sufficient protection against future unauthorised use' (Independent Review 2003:48).

In its report, the Victorian Parliament Law Reform Committee (2004:130–32) argued that the destruction of samples following completion of the profiling process would enhance the work of laboratories, simplify process requirements, and eliminate the need for a long-term security facility. It recommended that a sample obtained under the provisions of the Act must be destroyed as soon as practicable after a forensic profile has been derived from the sample (VPLRC 2004:132). This is the third major Australian report or inquiry in as many years to clearly enunciate the principle that the permanent retention of DNA samples following the derivation of a profile is not consistent with the need to protect the genetic privacy of testees; and, that there was, in such systems for the permanent storage of DNA samples, an inherent risk of the use, or misuse, of such samples for unauthorised purposes (see also the ALRC 2003).

It may seem remarkable to discuss community 'consent' within the paradigm of criminal justice. However, as Dodson (2000:58–60) points out, developing international instruments, such as the UN Draft Declaration on the Rights of Indigenous Peoples, provide Indigenous peoples with certain collective rights in relation to their cultural heritage, including their genetic heritage. The Draft Declaration is grounded in the knowledge of the particular conditions that pertain to Indigenous intellectual and cultural property. In traditional Indigenous law a much less distinct separation between the individual and the group is made in relation to ownership than in western systems of law. Indigenous cultures 'possess their various knowledges collectively, and since genetic knowledge is inherently family knowledge, consent to the collection, use and storage of genetic material is a community issue (see ATSIC SJC 2002). This must have particular relevance in relation to criminal justice systems and their application of DNA regimes to Indigenous people, where the sample of one person can be said to contain the collective property rights of the group. In relation to requests for DNA, what might appear a perfectly straightforward transaction between one individual and another to non-Indigenous people, could have a broader, deeper potential significance to Indigenous participants. In this cultural context, consent to the permanent retention of genetic material is not a solely individual matter.

The Universal Declaration on the Human Genome and Human Rights is also explicit in relation to the issue of consent. Article 5 (b) states that in all cases of research on the human genome, the prior, free and informed consent of the person shall be obtained, while Article 9 of the declaration states that the principles of consent and confidentiality can only be limited, by law, for compelling reasons (UNESCO 1997; see also Kellie 2001:174; HREOC 2002). Other instruments provide support to the Indigenous position as outlined in the Draft Declaration. The permanent retention of Indigenous DNA within a non-Indigenous controlled storage facility without the consultation, participation or consent of the Indigenous community appears to abrogate these articulated rights. The commission of a crime does not, in my view, *ipso facto*, warrant or justify the unlimited retention by the state of any person's genetic material, particularly where the retention of such material is justified on the grounds of administrative convenience. In the case of Indigenous Victorians, the retention by the state of a permanent and controlling interest in the genetic material of that group, appears to have been undertaken for no compelling reason, and more significantly without any attempt to engage with Indigenous notions of consent and proprietorship.

Whether intended or not, this capturing and permanent detention of the Indigenous genome by criminal justice authorities is not inconsistent with the history of race relations in Australia. From early days, colonial authorities were obsessed with controlling Indigenous people through classification, measurement, codification, and surveillance (Sackett 1993; Langton 1994:96–97).⁹ This story can't be adequately recounted here, but in Victoria, as in the other states, every aspect of Indigenous life was subject to white intervention, supervision, and instruction; a process intended to strip Indigenous people of every element of their culture and any entitlement to land (Chesterman & Galligan 1997:chap 5). Possession of the Indigenous genome by white authorities without consent is the post-modern or neo-colonial expression of this process of control and seizure, and gives future authorities many layers of potential surveillance and classification. Police, courts and prisons have played, and continue to play, a central role in the history of white intervention in Indigenous life — perhaps *the* central role of all the institutional frameworks. The creation of a gene bank containing the genome of Indigenous people under the control of criminal justice authorities could well be perceived by Indigenous people as resuming this historical role of intervention, even where the current authority for such retention is benign in its intention.

The introduction of a 'purpose' clause to the Act, as outlined above, would assist in clearly defining and containing the use of samples to forensic purposes. However, a more certain way to 'future-proof' Indigenous genetic material against an array of other purposes is to eliminate their permanent storage entirely.¹⁰ The destruction of each sample after profile extraction would also alter the character and meaning of an Indigenous suspect's consent to the DNA procedure, removing the dilemma of how an individual Indigenous person can consent to the loss of a collective right. Whilst the use of profiles represents other challenges, shifting the threshold from the automatic permanent retention of genetic material to its automatic destruction once the profile has been derived, would also largely remove the perception that the criminal justice system was engaged in a return to past practices with respect to Indigenous people.

'Suspects' for Life — Indigenous Juveniles

Perhaps the single most important impact of the new DNA regimes on Indigenous people concerns Indigenous juveniles. As mentioned, s464U of the *Crimes Act* 1958 (VIC) empowers authorities to take DNA samples from children as young as 10 (on application to the Children's Court, a provision unchanged following the government's 2004 amendment). Section 464ZGA(2) provides for the automatic permanent retention of such samples, and the profiles derived from them, where the juvenile has been found guilty of certain offences including murder, serious assaults, sex offences, armed robbery, and arson. Section 464ZGA(1) requires the destruction of samples and related information where a juvenile, found guilty of a forensic sample offence — but not those listed in s464ZGA(2) — has not been found guilty of 'any further offence before attaining the age of 26 years'.

9 Over seven hundred pieces of legislation have been passed by Parliaments in the States and Territories concerning Aboriginal people, the legal definition of an Indigenous person has been amended sixty-seven times, and in Victoria alone between 1854 and 1982, 74 Acts of Parliament were passed containing reference to Indigenous people (McCorquodale 1987:80–88; Gardiner & Bourke 2000: 47–8; Christie 1979:chap 8; Dodson 1994).

10 While such a shift would still be subject to future amendment, it would provide a new threshold for the treatment of genetic material under the Act that legislators may be reluctant to revisit.

What these sections allow for is the lifetime (and post-lifetime) retention of samples and profiles taken from Indigenous juveniles from as young as 10. Given the relatively high rates of re-offending for minor offences amongst Indigenous youth, the condition of s464ZGA(1) may rarely be invoked, particularly with its generalist wording of 'any further offence'. At the very least, criminal justice authorities will have at their disposal the DNA samples and profiles of Indigenous and other juveniles for up to 16 years in some cases without any requirement for the further review of their retention. Some of the offences listed for automatic lifetime retention of juvenile samples and profiles also need to be seriously examined, particularly in light of the often poor relations that have existed between police and Indigenous youth in this state. Section 31, for example, lists certain forms of assault including resisting or obstructing police in the performance of their duties.

Kimmelman (2000) has pointed to the issue of the permanent entry into databases of juvenile profiles, a process which can make juvenile offenders 'suspects for life'. Such retentions by the state appear to undermine the central principles of juvenile justice, with its emphasis on rehabilitative ideals and practices, and as enshrined in the *Children and Young Persons Act 1989* (VIC). This is particularly so in the Australian context, where the issue of Indigenous youth contact with the criminal justice system has been extensively examined. The role of criminal histories, and their development at an early age, was viewed by the Royal Commission into Aboriginal Deaths in Custody as a key feature in the over-representation of Indigenous people in the criminal justice system — particularly with respect to Indigenous juveniles — and in the high rates of future adult Indigenous imprisonment (RCADIC 1991:vol 2, 275–82). The RCADIC specifically recommended that governments consider legislation providing for the criminal records of Indigenous juveniles to be expunged with a lapse of time, and non-conviction for offences as an adult (recommendation 93, see RCADIC 1991:vol 5, 90).

The Act does provide for the expungement of a juvenile's DNA record, but it's clear that this process is highly qualified. Although the provisions for destruction of DNA samples taken from juveniles are similar to those for fingerprints,¹¹ it is certainly the case that the DNA 'record' (sample and profile) of an individual is a much more significant document than a fingerprint, and attempts to conflate the two are misguided. As previously stated, not only does the DNA sample contain information on biological facets of an individual offender, it also conveys information pertaining to the offender's family, and his or her familial or racial group. There seems no pressing argument for lifetime retention in circumstances where the individual offender may have committed their 'sample offence' crime in their teens, and where the opportunity to re-sample at any point in the future remains if that individual were to become a suspect to a serious offence.

The retention of the profiles for ongoing matching purposes is a further issue. While the commitment of a forensic sample offence does represent a serious offence, does this justify criminal justice authorities retaining a juvenile record to be routinely employed in matching exercises between crime scene profiles and offender profiles for the lifetime of that offender? The relatively high rates of offending by Indigenous juveniles in this state (Gardiner 2001:69) could ensure that a significant proportion of Victoria's Indigenous youth have profiles permanently, or semi-permanently, entered on the state's DNA database, to be routinely used in matching exercises concerning crimes for which they are not suspect, and possibly for decades after their original offence. This would appear to place

11 Section 464ZGA provides for similar conditions, and wording to apply to the destruction of the DNA of juveniles, as does section 464P in relation to the destruction of the fingerprints of juveniles, except that in the latter case the destruction must be requested

Indigenous youth at a disadvantage in comparison with their non-Indigenous counterparts, creates an additional and ongoing form of penalty on the individual after they have been sentenced, and seems contrary to the whole notion of rehabilitation within juvenile justice. In short, it could well be the case that Indigenous juveniles are already over-represented in DNA databases in Victoria, and are developing a new form of 'criminal history' with which to contend over the course of their life.

In its Inquiry, the Victorian Parliament Law Reform Committee (2004:197–98) found that the Children's Court has required the prosecution to produce more than a finding of guilt for a forensic sample offence to have a prospect of success on application, with approximately one quarter of applications being granted. The majority of applications are now based on the most serious offences, and where the juvenile has a prior history. Given this situation, the Committee found that applications for orders on juveniles should continue to be made on a case by case basis (VPLRC 2004:199). However, further support for the rehabilitative principle could also be made were section 464ZGA(1) of the Act to be amended, such that the 'further offence' be more narrowly defined as a further serious offence. Such a change would close the loophole that currently permits the permanent retention of the sample and profile of an Indigenous or other juvenile serious offender, who commits a single further minor offence.

Potential Impacts of DNA Procedures

There are a number of issues concerning the potential impact of DNA procedures on Indigenous Victorians. The first is the scope and breadth of the 'net' being cast by the Act to authorise DNA testing, under its retrospective provisions. As with other offenders, Indigenous offenders can be asked at any time, either while in custody, or upon release, to undergo a DNA procedure irrespective of the nature of their latest offence, or whether they are suspect to a DNA forensic sample offence, and regardless of when they were previously found guilty of a forensic sample offence. This one element of the Act (s464ZF) places a very large proportion of the adult Indigenous offender population of the state in the position of potential 'testees', and could well lead to increased numbers of custodies and detentions for DNA procedures by consent or by court orders, and thus increased levels of contact with criminal justice system. Indigenous people in Victoria would be more subject, on a proportionate basis, to the retrospective effects of the Act, suffering additional forms of penalty after they've been sentenced appropriate to their offence, and potentially years after the event. The principle of presumed innocence would also be qualified by the ability of authorities to extract DNA samples from Indigenous offenders who are not suspects to a crime (see Meagher 2000:84).

The second issue concerns the nature of the DNA testing procedure itself. The introduction of self-administered buccal swabs will limit the time employed for the sampling procedure, and does on the surface appear to represent a less intrusive process than alternatives. However, to assume what level of intrusiveness that this procedure, or any other sampling procedure (intimate or non-intimate) may have for Indigenous people is to make a cultural judgment that may well be inappropriate. The Indigenous community in Victoria is a diverse community in terms of the range of its cultural and traditional practices and beliefs, and also includes Indigenous people from around the country. It cannot be assumed that non-Indigenous attitudes to the body, or to gender issues, will be replicated by a member of the Indigenous community in relation to such testing and the methods that may be employed. In this respect, the Victorian Parliament Law Reform Committee (2004:223) was correct to advocate the inclusion of provisions in the Act that apply in Commonwealth legislation: namely, that in granting orders for a forensic procedure on a suspect, consideration be given in the case of an Indigenous person to his/her customary beliefs.

A third and related issue concerns relations between Indigenous people and the police. In a situation in which a request for consent is underpinned by the knowledge of all parties that the sample can be ordered, (and now, in some circumstances, by police themselves), many Indigenous suspects will feel that the DNA request itself amounts to a compulsion to give evidence (see NSW Ombudsman 2001:16–17; Independent Review 2003:24–25). Standing behind each request is the knowledge that ultimately police have the power to physically enforce the DNA procedure.¹² While the immediate nature of such interactions between police and suspects may not differ between Indigenous and non-Indigenous people, for Indigenous people a rather different context is at work, and this broader context needs to be taken into account.

While in contemporary times the Victoria police have made serious efforts to improve relations with Indigenous communities, the fact remains that for 150 years police were viewed by Indigenous people in Victoria with deep suspicion, not least because of the role played by police in child removals (see Cunneen 2001; Gardiner & Takagaki 2002:318; Cunneen & Libesman 1995:29–67). The contemporary relationship continues to see Indigenous Victorians experiencing contact rates with police that the non-Indigenous community have never experienced, particularly in relation to the policing of public spaces, and the disproportionate imposition of so-called good order offences (see Mackay & Munro 1996; Gardiner & Mackay 1998). Providing police with new and greater powers to detain and process Indigenous people, and to act as the agents for the removal of biological material is unlikely to enhance this relationship. One failing of the Act therefore is the absence of provisions that would direct police, as the NSW and Commonwealth legislation do, to take into account the particular circumstances that Indigenous people face in relation to the criminal justice system. While no panacea, the combination of this provision with the need to take into account customary beliefs could help to ensure that DNA procedures on Indigenous people are handled in the most appropriate way possible.

Profiling, Race¹³ and Probability

In the early 1990s concerns were raised about the potential for DNA profiling and matching techniques to adequately allow for variations that may occur between different ethnic or racial groups (see Eastaek & Eastaek 1990, Eastaek 1993). Such concerns centred on the issue of probability. When a crime scene profile is matched with a suspect profile, investigators must then calculate what the odds are of achieving that match in a given population. Many commentators, such as Dawkins (1998), argued that where the suspect/offender's racial or ethnic identity is known, the calculation of the probability of a coincidental match should only be undertaken in reference to that identity, based on the

12 In a widely viewed account of forensic procedures, SBS's *Insight* program showed both prison and police officers involved in the use of physical force to extract a sample of blood from a prison inmate at Bendigo Prison -- eight officers, including three in riot gear, and a police dog were used to 'assist' the procedure (NSW Ombudsman 2001:18; *Insight* 2001; Saul 2001:83).

13 Population genetics, and the Human Genome Project, (sometimes referred to by Indigenous people in Australia as the 'vampire project', see HREOC 2002), have generated a significant divergence of opinion amongst academics and commentators over the issue of 'racial difference', and the constitution of 'race' itself, with the same material evidence used to argue for both human similarity and human difference. But, many commentators continue to view 'race' as a social construct tied to historical events, such as colonialism (see, for example, Outlaw 1999). The definition of Indigenous people employed by the Commonwealth Government, which has been generally accepted by Indigenous groups since the late 1970s, contains three elements, viz, that an Indigenous person is defined as such by family background, Indigenous community recognition, and self-identification (see Gardiner & Bourke 2000:44).

recognition that some genetic characteristics can be particular to, or relatively common within one racial or ethnic group, but rare in the rest of the community. Many of these arguments have now given way, due to the increased sophistication of profiling techniques. However, it is worth noting that there exists some significant differences between the system used in Victoria regarding racial/ethnic difference, and those employed by counterparts overseas.

In the United States the FBI's national DNA database system, contains a population index comprised of separate databases maintained for whites, and blacks, and two separate databases for Hispanics (Loftus 1999; FBI 2002). The US National Research Council (1996:3) stated that while differences among individuals within a group are larger than those between groups, nevertheless, the inter-group differences are large enough for the FBI to keep separate databases from those groups. Moreover, the Council recommended (1996:13–4) that if the 'race of the person who left the evidence-sample DNA is known, the database for the person's race should be used: if the race is not known, calculations for all racial groups to which possible suspects belong should be made'. In the United Kingdom three population databases are used for estimating match probabilities, comprised of profiles from people described as Caucasian, Afro-Caribbean and Indo-Pakistani (see Griffith 2000; FSS 2000). The Victoria Police's Victorian Forensic Science Centre (VFSC) uses a statistical approach to analyse DNA matching profiles using 'likelihood ratios' (VFSC 2004). The VFSC employ sub-population databases comprised of samples from Caucasians, Asians, Vietnamese, and Aborigines.¹⁴ However, the process of selecting which subpopulation database to use is based on the ethnicity of the offender, and not the suspect. Unlike the FBI, the VFSC does not routinely calculate likelihood ratios based on different ethnic population groups in the community, when the offender's ethnicity is unknown. However, as observed, the issue may now be moot, given the increased sophistication of DNA testing regimes (Turbett 2001). Regardless of the methodology the VFSC employs, and current advances in DNA technology, calculations of probability may yet be deemed to be contestable at court (see Saul 2001:96–98; Findlay & Grix 2003:278–79).

Benefits for Indigenous People

As a community which experiences high rates of victimisation for serious crimes, Indigenous people will benefit from the capacity of the DNA regime in assisting with the resolution of serious crimes. In particular, Indigenous people have significant levels of reportage as victims of crimes against the person, in jurisdictions around Australia (Cunneen & Kerley 1995). The situation of Indigenous women is pertinent. As with Indigenous women in other jurisdictions, Indigenous women in Victoria experience high rates of reportage as the victims of crimes against the person. Indigenous women are nearly two and a half times more likely to report as the victims of rape than non-Indigenous women, twice as likely to report as victims of sex offences, and almost four times more likely to report as victims of serious assaults, than non-Indigenous women (Gardiner & Takagaki 2002). They are also over three times more likely to report as victims of aggravated burglary. These offences fall largely within the ambit of forensic sample offences. Indigenous men also experience high rates of victimisation, and stand to benefit from any investigative tool which can operate to minimise or deter crime.

14 The sub-population databases are comprised of profiles derived from samples from 350 'Caucasians', 80 'Asians', 98 'Vietnamese', and 100 'Aborigines'. The Aboriginal samples are from Queensland — possibly an oversight, given the diversity of the Indigenous genome (Information supplied to the author by the VFSC.)

Another area which can be beneficial for Indigenous people is the use of DNA profiling in providing exculpatory evidence. In the United States a significant number of prisoners on death row have been released due to the presentation of exculpatory DNA evidence. In April 2001 an Aboriginal man was released from a Queensland prison after serving 10 months of a six year term for rape. The Queensland Court of Appeal quashed his verdict on the basis of exculpatory DNA evidence that had not previously been presented (Kellie 2001:174). DNA profiling may well assist in the clearing of innocent Indigenous people in Victoria, either accused, or suspected of having committed, serious and other crimes.

As members of the broad community, Indigenous Victorians also stand to benefit from any overall reduction in crime, including the resolution of unsolved crime, that DNA profiling may contribute to. The rights of Indigenous Victorians to protection from criminality are no different to those enjoyed by the rest of the community.

Of the DNA cases carried out so far by the Victoria Forensic Science Centre, approximately fifty percent of the profiling results have established that the suspect was not the source of the sample associated with the crime — ie he/she was excluded as being the perpetrator of the crime. However, the Office of Public Prosecutions has stated that there has been no case of a fresh forensic sample being introduced to overturn a recorded conviction in Victoria (Independent Review 2003:61).

Conclusion

The aim of this article was to show the potential impacts of the new DNA regimes on Indigenous people, in particular on Indigenous people in Victoria. While many of the issues surrounding DNA procedures will affect the non-Indigenous community, only a very small proportion of its total population is in contact with the criminal justice system. By contrast, the Indigenous community has such high levels of contact that any significant changes in the criminal justice area will have significant impacts on that community as a whole.

The three stand out issues to emerge in this discussion have been: first, the over-representation of Indigenous people for arrests, convictions and incarcerations will translate under the DNA regime to an over-representation of Indigenous profiles on the state's DNA database. The 'racially skewed' database will create its own outcomes, and has the potential to place the Indigenous community under a cloud of suspicion. Second, the over-representation in relation to profiles will be replicated in the state's DNA storage facility, where the permanent storage of Indigenous genetic material without consent raises issues concerning ownership, potential future uses, and the abrogation of Indigenous genetic rights. And third, and perhaps most significant, the impact of these new regimes on Indigenous juveniles and juvenile justice processes, with the potential creation of a class of Indigenous 'suspects for life', whose samples and profiles may be entered into these systems when as young as ten years old.

I have made the following suggestions which I believe will go some way towards rebalancing the DNA regime in Indigenous people's favour. They are:

- the introduction of a spent convictions provision, which would entail destruction of the profile after a determined period of non-offending;
- the automatic destruction of the profile immediately following a suspect's elimination from suspicion;
- the 'capping' of forensic sample offences to the definition of serious indictable offences (with provision for examination of some categories, such as Theft);

- the automatic destruction of DNA samples once the profile has been derived;
- the inclusion of provisions which require the recognition and consideration of the customary beliefs of Indigenous suspects;
- the introduction of a provision requiring police and courts to take into account the unique position of Indigenous people in the criminal justice system;
- that Section 464ZGA(1) concerning juveniles be amended such that a further offence is defined as a serious offence.

Many of the above suggestions are generic in their scope, and will have an effect on non-Indigenous and Indigenous suspects and offenders alike. They provide for a somewhat different context within which DNA sampling may operate; one in which the rights of individuals and communities to privacy are more sensibly balanced with the right to protection from crime, and as such make a general improvement to the Act. However, these suggestions may not significantly reduce Indigenous over-representation in the state's database system, at least in the short term, but they should ensure that the volume of 'contacts' between Indigenous people and the DNA regime is relatively contracted and more controlled than under the present system. The shift to police authorised testing also creates a potential hurdle for Indigenous and non-Indigenous suspects, who will no longer have access to judicial oversight.

The Victorian Parliament Law Reform Committee (2004:297) recommended that relevant Indigenous organisations be consulted on the most appropriate form of legislative and practical support for Indigenous people who are requested or ordered to undergo a forensic sample procedure. As noted at the outset, other jurisdictions provide for legal and/or interview friend support for Indigenous people in these circumstances. While the number of requests for such support has apparently been quite low, Victoria should move into line with the Commonwealth and New South Wales on this element of the Act, particularly for situations where an Indigenous person's customary beliefs or cultural practice prevent them from articulating their opposition to testing, or a particular form of testing, to a non-Indigenous person, or person in authority. The Aboriginal and Torres Strait Islander Social Justice Commissioner has also called for consent procedures to be more culturally appropriate, and for the purpose of the procedure to be clearly articulated at the time (HREOC 2002). Cultural appropriateness also needs to be examined in the light of volunteer testing, not only in relation to requests or offers for testing from individuals, but also in relation to requests made to communities for mass screen testing.

The trend towards an ever expanding regime of offences subject to DNA sampling is a matter of concern. Forensic procedures legislation was originally enacted in 1989 to cover a limited array of serious indictable offences, such as homicide, rape and serious assaults. However, as noted, subsequent amendments have successively broadened the range of offences to be dealt with under the Act, so that, now some property offences fall within the definition of forensic sample offences. Future amendments which seek to expand the offence range further into crimes against property will undoubtedly widen the net for increased sampling of Indigenous alleged offenders, particularly Indigenous youth offenders, who have high rates of offences against property.

The DNA regime will have a positive impact on the Indigenous community in terms of alleviating crime victimisation and in relation to the exoneration of those falsely accused or convicted. Yet, in its current form the Act places too much weight on greater powers for criminal justice authorities, and insufficient purpose for the rights of individuals and communities, bearing in mind that the rights of suspects and offenders are also, in part,

expressions of broader social rights subsisting in the community. The position of the Indigenous community in relation to this regime is unique. Such is the place of criminal justice matters in the lives of Indigenous people that this regime will impact on Indigenous communities as a whole, particularly as the cumulative effects of permanent retention of samples and profiles take hold, and the knowledge of this becomes widespread. A large proportion of the Indigenous community will, at any given moment, be subject to the cross-matching of offender profiles with crime scene profiles, regardless of whether they are a suspect to that crime or not. In addition, this ongoing 'surveillance' of Indigenous people will be conducted without their immediate knowledge, while at the same time, the genetic material of virtually entire family structures will be permanently locked away.

As alluded to earlier, for many decades civil authorities in Victoria, and in Australia more generally, held files on Indigenous people, the contents of which were kept secret from the latter. These files contained information on the most intimate details of an Indigenous person's life, and were held and maintained throughout and beyond the course of their life, and the existence of these files remains a matter of controversy today. Indigenous people were never privileged to have access to their own files, never privy to the types of reasoning, for example, which such files might contain to justify the forced removal of a child (HREOC 1997; Manne 2001). Without suggesting that anyone in the criminal justice system has entertained a return to the past, there is a very uneasy sense of *deja vu* emanating from the new DNA regimes in this respect. This is an important and overlooked point. The new systems rely for their integrity not just on their capacity to work effectively, predictably and to deliver results. They also rely on the confidence that the community has in them, and the perception that they are designed to target criminality and not the general rights of the community. The Indigenous community brings its own particular perspective, and history, to bear on this new regime, and maintaining Indigenous confidence in the system should be a priority.

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