



## **Forensic use of bioinformation: ethical issues**

### **Nuffield Council on Bioethics**

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## Introduction

1. Founded in 1957, JUSTICE is a UK-based human rights and law reform organisation with around 1600 members. Its mission is to advance justice, human rights and the rule of law. It is also the British section of the International Commission of Jurists.
2. We welcome the Council's consultation on this important issue. The genetic information contained in DNA represents the most intimate medical data an individual may possess. We consider that the current law governing retention of DNA on the NDNAD involves a serious and disproportionate interference with fundamental rights. We are additionally concerned that the extent of this interference is significantly underappreciated by the wider public, due in large part to the lack of public awareness concerning NDNAD and DNA itself. We therefore welcome any measure that seeks to foster public debate on this issue.

***Q2a – From whom should the police be able to take fingerprints and DNA samples? At what stages in criminal investigations and for what purposes? Should the police be able to request further information from DNA analysts, such as physical characteristics or ethnic inferences?***

3. The power of police to take fingerprints and DNA samples from suspects without consent should be limited to those whom the police have arrested (i.e. where the police reasonably suspect the person has committed an arrestable offence), *and* where the taking of the bioinformation would assist the investigation of the offence.
4. In other words, the power to take fingerprints or DNA samples should not extend to those cases where the police have no reason to believe that the taking of such information will assist in the investigation, e.g. someone arrested for computer fraud where their identity is not at issue.
5. Police should, of course, remain free to request or invite individuals to provide bioinformation such as fingerprints or DNA samples on a voluntary basis to assist with their inquiries. But the power to take samples without consent should be strictly limited to those whom the police have arrested. A broader police power to compel samples without the requirement of reasonable suspicion would, however, seem to us a substantial and unwarranted intrusion with the rights to personal privacy and the physical integrity of the person.
6. The question of police requesting further information from DNA analysts, such as physical characteristics or ethnic inferences, seems to us only to arise in the case of crime scene samples, where the identity of the person is otherwise unknown. In such circumstances, it is reasonable for the police to request as much information from DNA analysts as may assist in

identifying the person who left the sample. The evidential value of this DNA profile would, however, be limited by the technical limitations of profiling techniques.

**Q2c – Do you consider the current criteria for the collection of bioinformation to be proportionate to the aims of preventing, investigating, detecting and prosecuting criminal offences? In particular: is the retention of bioinformation from those who are not convicted of an offence proportionate to the needs of law enforcement?**

7. No. The current criteria for the collection and retention of bioinformation by police are wholly disproportionate to the needs of law enforcement. In particular, the retention of DNA samples of persons either not charged or subsequently acquitted appears to us a gross interference with the right to personal privacy. We note that this view is at odds with the 2004 judgment of the House of Lords in *R v Chief Constable of South Yorkshire (ex parte S and Marper)*,<sup>1</sup> in which the House concluded that the retention of DNA samples of persons arrested but not subsequently convicted did not interfere with the right to respect for personal privacy under Article 8(1) of the European Convention on Human Rights, and – even if it did – was a legitimate restriction under Article 8(2). With respect, however, we consider the decision of the House in *Marper* to be deeply flawed. We further predict that it is unlikely to be upheld by the European Court of Human Rights on appeal for the following reasons.
8. First, it seems clear that the analogy drawn between police retention of suspects' photographs and fingerprints – the basis of previous decisions of the European Commission of Human Rights in *McVeigh, O'Neill and Evans v UK*<sup>2</sup> and *Kinnunen v Finland*<sup>3</sup> - and police retention of DNA samples in *Marper* fails to compare like with like. Fingerprints contain no intrinsic bioinformation other than as biometric identifiers. While police retention of a suspect's fingerprints may constitute an interference with personal privacy, the interference in such cases seems minimal. The amount of medical information contained in an individual DNA sample, by contrast, seems to us difficult to understate. As the consultation paper itself notes, 'the analysis of DNA can reveal sensitive information about family relationships. Personal medical information may also be obtained by analysis of DNA samples'. We would go further and argue that the genetic information contained in DNA represents the most intimate medical data an individual may possess. The knowledge that an unspecified number of people may have access to that information over an indefinite period must surely constitute an interference with personal privacy. In the circumstances, a sensible analogy between police retention of fingerprints and police retention of individual DNA samples is difficult to sustain.

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<sup>1</sup> [2004] UKHL 39.

<sup>2</sup> (1985) 5 EHRR 71.

<sup>3</sup> App. No. 24950/94 (15 May 1996, unreported).

9. Secondly, recent case law from the European Court shows that retention by the police of personal information can plainly amount to an interference with the right to respect for personal privacy under Article 8(1). In *Rotaru v Romania*,<sup>4</sup> for instance, the Court held that the collection, storage and use by a public authority of personal data interfered with the right to privacy under Article 8(1).<sup>5</sup> In addition, in *Peck v UK*,<sup>6</sup> the dissemination of CCTV footage in a public street was held to interfere with the right to respect for privacy. Finally, in *Friedl v Austria*<sup>7</sup> the Commission held that the retention of photographs of individuals identified by the police interfered with Article 8(1). Given the findings of interference with Article 8(1) in cases of photographs or CCTV, it seems deeply unlikely that the European Court of Human Rights would concur with the view of the House of Lords in *Marper* that the indefinite retention by the police of DNA information which contains personal and sensitive data does not also constitute an interference with the right to respect for privacy under Article 8(1) ECHR.
10. Thirdly, if we are correct that the Court would likely find that police retention of DNA samples would constitute an interference with Article 8(1), we further consider that it will find the retention of DNA samples of persons suspected, but not subsequently convicted, of an offence to breach Article 8(2) on the basis that such retention is unnecessary and disproportionate. Specifically, the principle of proportionality under human rights law requires that any interference with fundamental rights must be proportionate to the legitimate aim being pursued. In the case of police retention of bioinformation, therefore, it would require the legitimate interest of detecting and preventing crime to be balanced against the right of individuals not to have their personal information held without their consent. Furthermore, the principle of proportionality requires that the more intimate the data retained, the more important the competing interest has to be. Thus, while the legitimate interest in the prevention and detection of crime may justify the retention of DNA profiles of those proven guilty and charged, it cannot serve as a justification of the indefinite retention of DNA of individuals who are by law presumed to be innocent.<sup>8</sup> A DNA database established in the interest of the investigation and prevention of crime may not be misused to gradually attain a comprehensive national database by including individuals who have not been proven guilty. In our view, the creation of a suspect database cannot be justified as necessary and proportionate under Article 8(2).

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<sup>4</sup> (2000) 8 BHRC 43.

<sup>5</sup> Similarly, the retention of information about a person's private life on a police register or by public authorities amounts to an interference with the right protected under Article 8(1); *Leander v Sweden* (1987) 9 EHRR 433, *Hewitt and Harman v UK* (1992) 14 EHRR 657.

<sup>6</sup> (2003) 36 EHRR 41.

<sup>7</sup> (1996) 21 EHRR 83.

<sup>8</sup> Article 6(2) ECHR.

**Q2d – Is it acceptable for bioinformation to be taken from minors and for their DNA profiles to be put on the NDNAD?**

11. In our view, the criteria for the taking and retention of bioinformation samples from minors should be the same as those for adults: samples should only be taken where the minor has been arrested and where the taking of the sample would assist in the investigation of the offence; samples should only be retained where the minor has been convicted of a serious criminal offence.

**Q3a – Is it proportionate for bioinformation from (i) suspects and (ii) volunteers to be kept on forensic databases indefinitely? Should criminal justice and elimination samples also be kept indefinitely? How should the discretion of Chief Constables to remove profiles and samples from the NDNAD be exercised and overseen?**

12. No, for the reasons set out in our answer to Q2c above. In our view, it is only proportionate to retain the samples of those convicted of serious criminal offences. It would not be proportionate to retain the sample of someone arrested for shoplifting, for instance.

13. We would further argue that the principle of proportionality requires that only the DNA profile is retained, not the full DNA sample. The retention of DNA information of convicted persons is only necessary and proportionate insofar as it assists the police with the identification of the relevant individual. The biological sample derived from the blood or bodily smears contains all of the most intimate genetic information about an individual. On the other hand, the DNA profile derived from the sample may be reduced so as to contain only that genetic information which provides the necessary markers for the identification of the individual from whom it was obtained ('junk DNA'), but no sensitive or personal data.

14. Given that it suffices to retain DNA profiles for the purpose of identifying the individual from whom the DNA information was obtained, the retention of biological samples after the profile has been taken from the sample is unnecessary and disproportionate. Therefore, biological samples taken from convicted individuals should be destroyed, at latest after conclusion of the trial.<sup>9</sup>

15. Should the need for DNA samples of previously convicted individuals arise in case of future development of speedier and more sensitive means of searching the database, which are incompatible with the present method of profiling, new samples could be taken at that stage.

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<sup>9</sup> The Council of Europe Committee of Ministers recommended that biological samples be destroyed 'after rendering of the final decision in the case for which they were used, unless it is necessary for purposes directly linked to those for which they were collected'; Council of Europe Committee of Ministers Recommendation No R (92) 1, para. 8.

This would also have the advantage that new samples would be taken under conditions where it would be known what the new techniques require from the sample.

16. As opposed to samples taken from identified individuals, the retention of crime scene samples does not interfere with anyone's right to respect for privacy, provided that the samples have not been matched to an already-identified individual. The retention of such anonymous samples thus does not raise an issue with Article 8.

**Q3c – Who should have access to information on the NDNAD and IDENT1 databases and how should bioinformation be protected from unauthorised uses and users? Should forensic databases ever be made available for non-criminal investigations, such as parental searches, or the identification of missing or deceased persons?**

17. Section 64(1A) of the Police and Criminal Evidence Act 1984 prohibits the use of retained DNA samples for purposes other than those 'related to the prevention or detection of crime, the investigation of an offence or the conduct of an investigation'. In principle, this restriction should be consistent with the proportionate interference of the privacy rights of those convicted of serious criminal offences.
18. We are concerned, however, that this restriction is in fact being interpreted in a manner that is at odds with the right to respect for privacy. For example, we note the National DNA Database board of England and Wales has already approved two research projects using genetic samples from the database for the purpose of researching the possible identification of ethnic and familial traits.<sup>10</sup> In both cases, no consent was obtained from the persons from whom the DNA had been taken prior to the research project. In our view, the interests of medical research with only the broadest connection to the investigation of crime cannot justify the interference with the right to respect for privacy of individuals convicted of an offence. Less intrusive alternatives, such as the use of DNA information from individuals who consent to the use of their information for medical research, are available.
19. In order to avoid future instances of what seems to us a misuse of the data contained on the NDNAD, we therefore recommend that the language of section 64(1A) be narrowed to the use of DNA for comparison or identification only, and to exclude its use for medical research, as well as the analysis or use of information on genetic disorders, personality or behavioural traits and dispositions, as may this become possible in the future.<sup>11</sup>

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<sup>10</sup> R Williams, P Johnson and P Martin, *Genetic Information & Crime Investigation: Social, Ethical and Public Policy Aspects of the Establishment, Expansion and Policy Use of the National DNA Database* (2004 School of Applied Social Sciences, University of Durham), p. 95.

<sup>11</sup> For instance, section 92 of the New South Wales *Crimes (Forensic Procedures) Act 2000* sets out a list of permitted purposes of the DNA database, including conducting forensic matches or speculative searches, to establish and administer

**Q3d – What issues are raised by the transfer of bioinformation between agencies and countries? How should such transfers be facilitated and what safeguards should be in place for the storage and use of transferred data?**

20. The transfer of bioinformation between agencies and countries raises the same issues concerning respect for individual privacy as are raised by the retention of bioinformation by a single agency. Any increase in the pool of potential persons who may have access to an individual's bioinformation is an increase in the extent of the interference with that individual's right to privacy. Although such interference may sometimes be justified as proportionate, it is essential that recipients of the information are bound by the same restrictions as should apply to those holding the information.

21. However, practical experience teaches that effective coordination between different government agencies is often difficult to achieve (c.f. the Home Office). The problems of ensuring effective compliance with safeguards are multiplied when bioinformation transfers from country-to-country are considered. For instance, although we welcome the latest EU Council Decision in relation to the protection of personal data processed in the course of police and judicial co-operation under the EU Treaty's Third Pillar, there is often a substantial gap between the principle of mutual recognition in EU law and the achievement of genuine equivalence in data protection standards. For this reason, we argue that any transfer of DNA profiles outside the UK should be subject to independent scrutiny to ensure that their use is attended by the same degree of safeguards as we argue should apply in the UK (e.g. profiles should not be retained where a person is not subsequently convicted, etc).

**Q4a – Is the use of DNA profiles in 'familial searching' inquiries proportionate to the needs of criminal investigations? Do you consider the use of familial searching may be an unwarranted invasion of family privacy?**

22. Whether familial searching of the NDNAD is proportionate is not something that can be answered in the abstract. Instead, it seems to us to depend on the seriousness of the criminal offence and the extent to which a familial search is likely to assist the investigation. We agree that the use of familial searching in the investigation of minor criminal offences would normally be a disproportionate interference with the right to respect of family privacy.

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the DNA database system, to provide an individual with DNA information about himself, to consider a claim that a miscarriage of justice under section 2 of the *Criminal Procedure Act 1993* has occurred or that a conviction should be overturned on appeal, to investigate a complaint in relation to the database, to compile statistics on the operation of the database, to make information available to other jurisdictions as sanctioned by legislation, to identify unknown deceased or severely injured persons (only with court order), or any other related purpose.

**Q4b – Certain groups, such as ethnic minorities and young males, are disproportionately represented on forensic databases. Is this potential for bias within these databases acceptable?**

23. No. In our view, the disproportionate representation of ethnic minorities and young men on the NDNAD only highlights the generally disproportionate nature of the retention criteria, i.e. the failure to remove the samples and profiles of those not convicted of a serious criminal offence.

**Q4c – Is it acceptable that volunteers (such as victims, witnesses, mass screen volunteers) should also have their profiles retained on the NDNAD? Should consent be irrevocable for individuals who agree initially to the retention of samples voluntarily given to the police? Are the provisions for obtaining consent appropriate? Should volunteers be able to withdraw their consent at a later stage?**

24. No. We consider it an abuse of trust that the initial consent of a volunteer to assist the police with their investigation of a particular crime should be taken as a licence for the indefinite retention of their DNA on a police database. In our view, samples obtained by consent should only be retained for the purpose of the particular investigation (including, where necessary, any subsequent criminal proceedings), and thereafter destroyed.

**Q4d – Would the collection of DNA from everyone at birth be more equitable than collecting samples from only those who come into contact with the criminal justice system? Would the establishment of such a population-wide forensic database be proportionate to the needs of law enforcement? What are the arguments for and against an extension of the database?**

25. No. The mere fact that such a database would be useful would hardly be sufficient to justify the massive interference with personal privacy that would result from its creation. Nor would the fact that everyone's DNA is stored in anyway ameliorate that interference. Indeed, the greater the amount of information stored, and the larger the number of people whose bioinformation is stored therein, means the more substantial the violation of personal privacy, particularly when the database is either hacked or subject to unauthorised access. From a practical standpoint, such a database would inevitably be partial (in an increasingly globalised society, for instance, many reside in the UK who were not born in it and vice versa). Nor is the previous experience of government with such large-scale IT projects of this kind encouraging. Leaving such practical objections aside, however, the concept of a population-wide DNA database seems to us flawed as a matter of basic principle. In our view, the intimate nature of individual genetic information means that storage on a national database could only be justified where strictly *necessary*, i.e. the proportionate pursuit of a legitimate aim. That something may be either useful or even highly desirable is not enough.

***Q5b – How much other evidence should be required before a defendant can be convicted in a case with a declared DNA match? Should a DNA match ever be taken to be sufficient to prove guilt in the absence of other evidence?***

26. No, there must always be *some* corroborative evidence to satisfy the tribunal of fact that the defendant committed the crime. The question of *how much* evidence is required, however, is not something that is susceptible to quantification. In order to discharge the standard of proof in criminal cases, it simply a matter that the tribunal of fact must be sure of the defendant's guilt.<sup>12</sup>

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<sup>12</sup> See e.g. the guidance of Phillips in *R v Doherty and Adams* [1997] 1 Crim App R 369 at p 375, recommended by the Judicial Studies Board as a specimen direction in cases involving DNA evidence.