

This response was submitted to the consultation held by the Nuffield Council on Bioethics on *The Forensic use of bioinformation: ethical issues* between November 2006 and January 2007. The views expressed are solely those of the respondent(s) and not those of the Council.

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QUESTIONS ANSWERED:

Question 1: The interpretation of bioinformation

ANSWER:

SGM Plus is sufficiently reliable to be used as one input in ascertaining identities, but it is not sufficient on its own. As there can be false positives a match based solely on SGM Plus should never be sufficient to ensure a conviction. Independent corroborating evidence is required.

Question 2: Sampling powers

ANSWER:

a/ For investigatory purpose, as the powers of arrest have been expanded (in particular with S.44 of the Terrorism Act and S.110 of the Serious Organised Crime and Police Act) so that basically anyone can be arrested for the most minor offence, the police should be able to take fingerprints, palm prints and DNA samples only from individuals that are charged, after they have been charged. For elimination purpose, on a voluntary basis exclusively, the police should be able to take DNA samples from victims and witnesses on the express condition that no DNA profile is stored on the NDNAD and that the DNA samples and profiles are destroyed preferably after their use and at the latest at the end of the investigation for which they have been taken. From my understanding, a second DNA sample is always taken from individuals being prosecuted, which makes it even less necessary to retain collected DNA samples. b/ No. Ensuring better crime prevention should for instance have budgetary priority. c/ The current criteria for collection and retention of bioinformation are not proportionate. That an innocent (never been convicted) can end up with his or her DNA kept for eternity is not proportionate to the needs of law enforcement. There are serious risks associated with this retention and the case for the increased effectiveness of the NDNAD as it grows in size has not been made. The Home Office explained in <http://police.homeoffice.gov.uk/news-and-publications/publication/operational-policing/DNAExpansion.pdf>: "Evaluation of the Programme has shown that the number of matches obtained from the Database (and the likelihood of identifying the person who committed the crime) is 'driven' primarily by the number of crime scene profiles loaded onto the Database." Helen Wallace, in <http://www.gene-watch.org/genewatch/articles/19-6Wallace.html> provides further analysis of the data available and makes it clear that "the success of the Database is determined largely by the number of DNA profiles collected from crime scenes, not from individuals." The situation between 1994 and 2001 when DNA samples were taken when a suspect was charged and the samples and profiles had to be destroyed when No Further Action was taken or the individual was acquitted was much more proportionate in that the bioinformation was retained only for convicted criminals. Even then, there should be a retention period for the DNA samples for convicted criminals where it is retained only for a maximum number of years since the last conviction, the exact number to be proportional to the sentence. As the latest figures revealed (http://gizmonaut.net/blog/uk/dna_1million.html), already a third of the NDNAD's samples is of innocents. If the current legislation continues to apply, soon there will be more innocents than criminals sampled and profiled on the NDNAD. The DNA samples contain so much of an individual's personal genetic information that it is essential to limit the retention period to prevent future misuse when technological and scientific progress in DNA analysis happens. Retention

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period of DNA profiles should be limited as well though the risks are possibly less serious. One danger is that the NDNAD holds information on the conviction status of individuals and this may be inaccurate (see <http://gizmonaut.net/bits/suspect.html#D20061122> for example), and of course the data held in the NDNAD may leak through for example illegal access or transfer to organisations with even less safeguards (such as information sharing with other countries). d/ See c/. It is not acceptable for bioinformation of innocent minors to be taken and retained. For convicted minors, the DNA samples and profiles should only be retained for duration proportional to their sentence.

Question 3: The management of the NDNAD

ANSWER:

As per the previous response, it is not proportionate to retain the DNA samples and profiles of suspects and volunteers. It is interesting to note that it is difficult to find out what the retention period is as conflicting, and confusing, statements have been issued (ranging from the first time the individual reaches 100-year old, to the time of his death, to no limit). The latest statement I could find is that, according to the Association of Chief Police Officers (ACPO) in its DNA Good Practice Manual, DNA is to be kept forever (see <http://gizmonaut.net/bits/suspect.html#D20061122>). Chief Constables may remove profile and samples, but only in exceptional cases. These apparently tend to be restricted to circumstances where the police have shot someone innocent (and he or she didn't die). A wrongful arrest is not deemed exceptional enough (see for example <http://gizmonaut.net/bits/suspect.html#D20060721>). The current restriction that the bioinformation is to be used only for purposes related to the prevention or detection of crime, the investigation of an offence or the conduct of a prosecution is so broad that it can easily be interpreted to allow uses that have not much to do with criminal justice. Letting the police - and the labs they use - retain DNA samples and profiles is trusting them to use these wisely in the future. Experience has shown that they can't be given such trust: leaks from supposedly secure and restricted databases such as the PNC are known to have happened, and it was revealed in FOIA requests obtained by the Observer and Genewatch that there already are likely illegal uses of the retained DNA by one of the processing labs used by the police (see <http://gizmonaut.net/bits/suspect.html#D20060721>). A related issue is the sharing of bioinformation with police forces from other countries. Safeguards for such exchanges are unclear and standard data protection measures such as data correction are too often not required. Currently the Information Commissioner's Office (ICO) puts the oversight squarely in the hands of the ACPO and the Home Office, which are obviously not independent (see <http://gizmonaut.net/bits/suspect.html#D20060906>) An oversight committee should be created, not just in an advisory role, but with powers to act. This committee should be able to receive complaints from the public. It should be composed of a minority of involved parties (Police, Forensic Science Service, etc.) and a majority of independent members (Genewatch, Nuffield Council on Bioethics, etc.) with the Chairperson being an independent member.

Question 4: Ethical Issues

ANSWER:

a/ I consider familial searching not to be proportionate, as again it will involve many innocents. This is an obvious and unwarranted invasion of privacy. Revealing genetic familial relationships not always known by family members is a clear breach of privacy that is unethical. This type of research has in the past been associated with eugenics, racism and discrimination. b/ No, the bias

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of having an over-representation in the NDNAD of individuals from some minorities (e.g., black males) compared to other groups is not acceptable. It shows likely prejudice by the Police (as they're the ones deciding when to take DNA samples) and it further criminalises the over-represented communities. c/ Irrevocable consent is never acceptable. Consent is likely asked, or demanded, when individuals are vulnerable and consent may be granted in an uninformed state or even under duress. Volunteers's DNA samples and profiles should not be retained. d/ Collection of DNA at birth would perversely be more equitable among the UK residents, but the establishment of such a database would have no proportionality whatsoever with the need of the justice system. Everyone would be worse off. DNA contains very personal genetic information and technological and scientific progress may help reveal much more information from a DNA samples than is currently possible. The temptation to use new techniques on the NDNAD may become too tempting to the Home Office, the Police and the DNA labs. The risks would be even greater if we ever get a Government keen on misusing bioinformation to further restrict people's rights and freedoms. Furthermore current data seems to indicate that this would not increase the detection rate (see answer to 4.1c). As a first step, evidence would have to be shown that retaining DNA profiles and samples of innocents makes a significant difference in detecting criminals. Then a much larger public debate would have to take place.

Question 6: Other issues

ANSWER:

Many questions focused on when DNA samples are taken, whether they should be taken at all, and then on retention. A related issue I touched upon in some of my answers is what happens to the DNA samples once taken and DNA profiles once created. This is completely opaque to the individuals who have had their DNA taken by the Police. To avoid temptation and reduce some of the risks, a permanent ban on commercialisation of any use of the NDNAD and of the DNA samples should be made explicit; with stiff sanctions for breach and effective control measures. There should be a duty to publicly report any misuse, such as a lab using the DNA for another purpose, an unauthorised access to the NDNAD, or a security incident resulting in the potential leak of NDNAD data. There's a need for an independent body with authority to investigate any complaint in how the samples and profiles are managed. Lastly, more information on what impact you expect the recommendations coming out of this consultation to have would be welcome.

Question 5: The evidential value of bioinformation

ANSWER:

a/ It is not possible to ensure all those concerned become expert in statistics and biology (and even ethics). There could be some education material made available to help those concerned be sensitive to the issues involved in the use of bioinformation. This material would need to have input from, and be reviewed by, experts independent from the Home Office, the police and the labs working for them. b/ A DNA match is insufficient on its own to prove an offence has been committed by a suspect as there could be a false positive, the evidence could be contaminated and lastly DNA is easy to gather and plant in order to frame someone on planted evidence.