

NATIONAL BIOETHICS COMMISSION

RECOMMENDATION

On the use of genetic fingerprints in criminal procedure

The National Bioethics Commission, on the invitation of its President, met on 23 March 2001 in order to examine the ethical and social issues falling within its competence which arise from the use of genetic fingerprints in criminal procedure and to formulate a proposal on the matter in accordance with Law 2667/1998. The Commission

- in the belief that any collecting of evidence in criminal procedure must be subject to the principles of respect for the human being's value and of the protection of fundamental rights and that, in the light of this, it must balance in an appropriate manner the protection of the rights of suspects and the security of citizens;

- taking into account the potential of new applications of technology in dealing effectively with crime and, more particularly, the possibility of using genetic fingerprints for that purpose;

- taking the view that insofar as this use (a) concerns information directly connected with the biological particularity of the individual examined, and (b) presupposes an intervention in his/her body, it raises serious issues of bioethics,

has arrived at the following observations, which constitute its proposal on the matter.

1. Definitions

The term *sample* refers to any material of biological origin which allows access to the DNA of an organism.

The term *samples file* refers to the filing and storage of biological samples.

The term *genetic fingerprint* refers to data acquired through DNA analyses of the samples. These analyses examine segments of DNA which consist of short tandem repeats of a series of nucleotides scattered in the genome. The data collected correspond to the length of these DNA segments, which differs according to the number of repeats of which they are composed.

The term *genetic fingerprints database* refers to the filing and storage of the data obtained by DNA analyses of the samples.

2. Information and examination of samples

The *information* contained in the genetic fingerprints is regarded as neutral, since the biological function of the segments of the DNA which are examined remains unknown. The Commission considers that the examination of the sample should be strictly limited to the formation of the genetic fingerprint only.

3. Value of the genetic fingerprinting method and limitations

The method of genetic fingerprinting in the detection of crime is based on the comparison of the genetic fingerprint of a known sample with the genetic fingerprint of a sample of unknown origin collected on the scene of the crime.

When the genetic fingerprints of the two samples *do not match completely*, the possibility of the sample of unknown origin coming from the known donor is precluded. In this case, the method is of absolute value for the preclusion of suspects.

When the genetic fingerprints of the two samples match completely, provided, of course, that there has been no contamination of the samples,

it is likely, but not certain, that the sample of unknown origin comes from the specific donor. The probabilities can be increased significantly - to a point approaching certainty as to the identity of the individual examined - if a considerable number of genetic loci is examined and appropriate statistical processing is applied.

The Commission would draw attention to the fact that if the method is to be applied reliably, population genetic studies are needed in order to determine the frequency of appearance of the genetic fingerprints in the various populations to be found within the borders of Greek territory.

4. Obtaining of samples

Given the value of the method of genetic fingerprinting, the Commission is of the view that collecting a sample from an individual may be permitted: (a) as a right of the individual him/herself with the purpose of demonstrating his/her innocence; (b) by a court order, as provided for in the paragraph which follows. The sample should be collected by specially trained personnel or a doctor.

5. Part played by the individual concerned

Where the judicial authority regards it as necessary that a sample should be collected, the Commission considers that the free consent of the individual concerned should be ensured. Any collection of samples by force is contrary to the principle of respect for the value of human beings. In cases where the individual concerned does not consent, the judge must evaluate his/her refusal freely. However, the view was also expressed by some members of the Commission that the sample could be also collected without the consent of the accused when he/she has been indicted for a felony and this is ordered by a judicial council.

In order to obtain the free consent of the individual concerned, the Commission recommends that he/she should be informed as to the procedure of the method, its purpose, the need for consent, and the consequences in the event of a refusal. The individual examined should have a right to have the sample re-examined by another expert.

6. Criminal offences

The Commission considers that the application of the method should be possible (a) in all cases of a criminal offence if requested by the individual concerned in order to demonstrate his/her innocence; (b) only for serious offences if it is undertaken on the initiative of the competent authority.

7. Examinations

The laboratories at which the DNA analyses are carried out should be agencies independent of the investigating authorities.

The laboratories should be staffed by specialists, should be of documented scientific authority, should have the necessary know-how, and should be equipped with security systems for genetic data collection and treatment which safeguard both the individual being examined and the specialist personnel. The laboratories could be supervised by the Ministry of Health or the General Secretariat for Research and Technology.

8. Samples files

Given that the acquisition of supplementary information on the person of the individual examined, irrelevant to his/her consent to the specific research, is possible from the samples which have been collected, the Commission regards it as essential that all the samples are destroyed once

the genetic fingerprints of that person are established. An exception could apply to samples which are derived from the scene of the crime for as long as the crime remains unsolved.

Furthermore, it is self-evident that special guarantees should be provided for the security of the stored samples until such time as they are destroyed.

9. Anonymous genetic fingerprints databases

In the light of an awareness of the need for population genetic data in order to apply reliably the method of genetic fingerprints, the Commission stresses that population genetic databases contain anonymous information and rely on the voluntary co-operation of the donors.

10. Named genetic fingerprints databases

The Commission considers that databases of named genetic fingerprints is permissible (a) in cases where the method has been applied and led to conviction of the person; (b) in other cases only with the written consent of the individual examined. In order to ensure independence of will in the latter instance, the Commission takes the view that written consent to the filing and retention of the data should be given after the completion of the court proceedings.

The Commission regards it as essential that a copy should be given to each individual examined.