Gattaca is already here?
An Interdisciplinary Approach to Forensic Biobanks

ABSTRACT

In recent years, advances in technology and science have had a significant impact on law and traditional investigative techniques. This extraordinary potential involves a more complex dimension for forensic investigation that experts and lawyers must learn to manage. A new powerful tool, forensic biobanks, has recently joined in the debate. Such biobanks are organizational structures collecting DNA profiles and human biological samples for judicial purposes. Italy, in acceding to the Prüm Treaty, enacted a statute (L. 85/2009) for the creation of a DNA National Database, and in Europe there other significant examples (UK, France, Germany).

On the one hand, scholars have stressed the role of this innovative instruments in criminal investigations and the importance of such legislative actions; but, on the other hand, forensic biobanks pose relevant issues concerning the respect of fundamental rights such as the processing of personal data and the protection of genetic privacy against potential discriminations or illicit uses. That is dramatically evident if we consider for example the so-called "familial searching", in which there is matching between a crime scene sample and genetic relatives, and the issue regarding the storage and the eventual destruction of the sample in case of acquittal.

In order to point out the complex landscape disclosed by forensic biobanks, this paper intends to analyze in a comparative perspective the current state of legislation around such structures. Moving from an interdisciplinary approach we will pick over both the criminal and private aspects converging in this topic; and, finally, we will draw some general concluding remarks on the scientific evidence in criminal trials.

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