Bioethical Biobanks: Three Concerns in Designing and Using Law Enforcement DNA Identification Databases

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DNA identification databases have made it possible to apprehend the perpetrators of crimes ranging from auto theft and petty burglary to serial rapes and murders. The national DNA database administered by the FBI currently contains information on more than three million individuals. As the databanks grow, so do fears about civil liberties. The research reported here discusses several legal and social policy issues that have been raised in regard to these biobanks—including the choice of loci to type for identifying individuals, the indefinite retention of DNA samples, and the use of the DNA samples or the identifying profiles for research purposes. Furthermore, it focuses on the possible value of the databases for research into the genetics of human behavior and the ethics of using them for this purpose. The full study is published under the title Behavioral Genetics Research and Criminal DNA Databases, 69 L. & CONTEMPORARY PROBS. 259 (2006).

Part I of the study considers the possible value of the databases for behavior genetics research. It concludes that the talk of a crime gene that has come from some critics of the existing legal framework is scientifically naive and that the databases themselves would be of little or no value in behavioral genetics research. Nonetheless, because statistical studies with the DNA samples might be of some scientific interest, the fears expressed in response to the growth of criminal DNA databases cannot be so easily dismissed. It is necessary to decide whether the samples should be available for studies of alleles that might be linked to behavioral traits such as impulsiveness, novelty-seeking, or aggressiveness.

Part II surveys state and federal database legislation. It shows that several previous articles have overlooked or understated the restrictions on medical or genetic research with convicted-offender samples. Many of the pertinent statutes, although not drafted with precision, preclude such research. Nevertheless, even clear statutory provisions are subject to amendment through the legislative process. Inasmuch as the constitution, as currently interpreted, offers rather weak protection for informational privacy, the policy question of allowing such behavioral genetics research with the samples in the law enforcement repositories must be confronted. One could argue that the existing limitations on research are squandering a useful resource for genetic research. Conversely, it can be argued that this research should be discouraged and that the samples should not be used for any purpose other than biometric identification and related research designed to this technology.

As to this policy question, Part III identifies and assesses some of the bioethical and social

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arguments against allowing such research. These include concerns about the possible misuse of or misunderstandings about the fruits of the research and the lack of consent on the part of the donors of the DNA samples. The issue is related to another important policy issue of whether the DNA samples should be retained at all as well as the first question of the research value of the law enforcement databases and repositories. The study suggests that the arguments for categorically precluding behavioral genetics research with the samples are not conclusive. On the one hand, the research need for these samples may not be pressing. On the other, the risks of psychosocial harms, informational privacy, and the protection of human subjects may not justify banning all behavioral-genetics research with the samples.

But even if the existing categorical rule against using the samples is thought to be unwarranted, the doors to the law-enforcement biobanks should not be thrown wide open. Some studies will be better designed to uncover interesting discoveries and to respect the privacy interests of the donors of the samples than others. With ordinary biomedical research involving human subjects, the peer review process for grant requests by academic investigators offers some assurance that the study design is appropriate, and review by IRBs offers further protection for the donors' interests. Comparable review should be required before releasing law-enforcement samples for behavioral-genetics or other biomedical research.