

## **A summary of a Ph. D. thesis**

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Subject:

*DNA profile analyses – criminal and evidence law issues*

The present Ph.D. thesis discusses the legal and criminal aspects of genetic tests. The subject, however, focuses not only on international standards, but it also refers to domestic legal systems, as well as to some medical issues. The work presents the problems of DNA as seen from different perspectives. The thesis consists of ten chapters preceded by introductory remarks.

The author presents a synthesis of the most vital academic achievements and points to some problems related to the former. The biological foundations of DNA have been discussed, starting with the history of genetic analyses applied in criminalistics. The history of applying genetic analyses in the Polish legal system has been presented, as well as their role in contemporary forensic investigations.

The thesis also lists legal regulations obligatory in various European countries and in the US, and the legal regulations and the effectiveness of the data base of genetic profiles in Poland.

The author also presents an expert opinion in the criminal trial, its role and potential errors. A number of problems have been identified in this particular area, such as contamination, a significant level of degradation, an inadequate method of storing or processing the genetic material or, finally, a wrong interpretation of the obtained results.

The work discusses the most frequently used methods of DNA isolation, as well as threats posing this process, which may result in vital consequences for using its results as evidence in criminal action.

The theory of the so-called “infallibility” of genetic investigations has been discussed, including a specification of factors which may affect the results of analyses, as well as the most frequently occurring mistakes and their reasons. The author presents the legal regulations regarding the protection of human rights in the context of genetic analyses. She discusses the problem of the acceptance expressed by the accused to have their genetic

investigations done and also to store and use biological samples for various purposes, other than genetic investigations.

The present work shows the different ways of using DNA analyses for the needs of the system of justice, and points at the opportunities of using DNA data bases for implementing the detective function and at the legal foundations regarding the application of genetic investigations as evidence in criminal action.

The aim and the main assumption of the present Ph.D. thesis is to present and analyse the legal regulations regarding not only the implementation of genetic tests but also to discuss genetic data bases in the domestic and international legal system. The analyses also refer to the mutual relationships of genetic investigations and the rights of an individual.

The issues discussed in the present work may become useful to a wide academic community, as well as to practitioners, as it provides an extensive analysis of the problem of using DNA profiles in criminal action.

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