**Msc Katarzyna Ćwik**

**Dissertation:**

***Elimination DNA databases. Legal and forensic issues.***

**Summary**

The first mention of the forensic databases could be found in antiquity and Middle Ages. In 17 century, there were the so-called Black Books – prototypes of the future anthropometric registries. In the second half of 19 century, Alphonse Bertillon and Francis Galton facilitated the creation of science-based forensic registration systems. The guiding idea was the creation of forensic databases allowing to identify reoffenders. Nothing has changed to this day.

Today, there are two main challenges considering forensic identification – increasing sensitivity of DNA identification, which can be a problem in the case of biological contamination, and the possibility of DNA transfer. Unrecognized contamination incidents could lead to costly interpretation mistakes, unlawful prosecutions, and wrongful convictions. To reduce the risk of false-positive identifications forensic laboratories and criminal investigators need to comply with restrictive procedures regarding crime scene examinations as well as laboratory activities. Elimination databases are also among the required countermeasures.

The dissertation concerns forensic databases with a particular reference to current legal and organizational challenges. Conclusions and the propositions *de lege lata* and *de lege ferenda* regarding the use of elimination DNA databases by law enforcement and criminal justice professionals have been based on the results of statistical and sociological analysis conducted both on nation and international levels. The proposed optimized algorithm concerning the functioning of elimination DNA databases provides guidelines facilitating the recognition of contamination incidences.