

# Free report about scientific techniques of identifying criminals

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The scientists use two techniques to identify criminals. They use the fingerprint comparison technique and DNA analysis. The use of fingerprints to identify people dates many years back. It dates to many centuries ago. It was not as sophisticated as it is today. In the ancient, Babylon, the businesspersons used their fingertips to carry out their transactions. They pressed their fingertips to clay and they recorded their transactions of the day. The Chinese used ink and paper, which helped them, identify their children.

In the 19th century, fingerprints were used as a way to identify criminals. An English chief magistrate working in India had the residents record their fingerprints in any business transactions so that the crime rate will reduce in India. Many people were involved in the improvement of the fingerprint use, Galton worked to develop the use of fingerprints and he began in the 1890s (Cole, 2002). He gathered samples of fingerprints and published his book in 1902 that analyzed the fingerprints. He gave the classifications basing on whorls, arches and loops.

In the late 1890s, the Metropolitan police in London started to use the fingerprints in identifying the criminals. He used the Galton technique and later created his own basing on the pattern, direction and characteristics of ridges. This formed a distinction from one individual to another. In the early 1900, the Scotland Yard established its own fingerprint bureau and they were presented in courts as evidence. FBI and New York prisons followed suits and established their own (Read, 2005). A computer database that stores the fingerprints of individuals exists in the present day and a comparison of the fingerprints in the crime scene and the ones on the

database helps in identifying the criminals.

The DNA analysis works using biological evidence. This technique works accurately. After identifying the suspect, the DNA of the suspect is compared to the DNA in the crime scene. The results from the comparison help in the identification of the person who committed the crime. In cases where a suspect is unknown, a sample of the DNA from the crime scene is compared to the ones in the databases of the offenders. The evidence from the crime scene can also match other crime scenes in different locations. The scientists come up with profiles of persons by testing the DNA. The profiling of DNA started in the 1980s by a scientist called Dr. Jeffreys. He discovered strands of DNA that had patterns that repeated themselves many times and it varied from individual to individual. This allowed forensic investigators to collect samples of DNA and come up with a database (Lazer, 2004). This is an effective way because it is not susceptible to flaws unlike eye witnessing. This technique matches the sample of the DNA of the person and the evidence from the crime scene.

The two techniques have some inaccuracies and flaws. If errors occur in the collection of the samples of the DNA, it leads to inaccuracies in the obtaining of the results. Handling of the samples collected should ensure that there is no contamination. In other instances, the criminals leave fake DNA in the crime scene and this leads to misleading results (Gardener & Bevel, 2009). The fingerprints in the crime scene might not be present because some criminals use gloves and this leaves the crime scene with no evidence. The techniques face challenges in court because it relies on probability. They evidence face a number of inaccuracies because the machines maybe faulty

and the investigators might change the evidence to suit their own needs.

Other forms of scientific ways to identify criminals include dental identification, medical prosthesis and comparison of postmortem and ante mortem x-ray results.

## **References**

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