Forensic Science and Crime

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Forensic science is the use of scientific methods and analysis of evidence from crime scenes to solve cases by the police. It involves the gathering of scientific evidence which proves a crime occurrence ("What Is Forensic Science"). Throughout history, detectives have searched for methods to catch criminals. However, a crime can occur in the middle of the night or in an isolated area where there are no witnesses. It is the evidence left behind that becomes the true witness to the crime. Forensic scientists convert these clues, using the latest technology, into evidence used in a court of law. Forensic science is a very diverse field in which chemical, biological, analytical science and mathematical analyses are applied. The most common techniques are physical evidence investigation and body fluids analysis.

Physical evidence is any evidence left behind after a crime has been committed. Fingerprint is one of the most reliable pieces of evidence as it can be developed on most surfaces such as paper, glass or skin. Prints are left on a surface because we are constantly secreting water, body oils and other compounds through our pores ("Personal Identification"). These materials secreting from our body are left on the surface in the form of a fingerprint. There are a number of methods to process the prints. The most advanced technique used to match fingerprints is by scanning the prints directly onto the computer. They can be compared at a rate as fast as 400,000 prints per second ("Personal Identification").

Another form of physical evidence is imprint identification. It includes the marks that are left after the criminal activity, such as footwear pattern, tire print, tool marks, and scratches. A shoe print left behind the crime scene can be useful evidence as the manufactured sole pattern of the shoe provides the estimated size, the make and model of the shoe ("Hilderbrand"). Besides, tool marks and scratches can yield individual characteristics of the tools used in the crime. It not only tells the scratches on the materials they come in contact with; they may also deposit paint and metal particles.

Body fluids analysis provides vital clues for the identification of the person responsible for the crime. The body fluids such as blood, saliva and semen found as stains at the scene or on the clothing of the victim can be used for DNA analysis. Since no individual on Earth possesses the same DNA profile, it is strong evidence for accusing the suspect.

Science is more applied to crime fighting now than before. As people find new ways to commit crimes and new means to cover their tracks, scientists develop new techniques to prove their guilt. Forensic sciences are very important to solving crimes or even helping innocents to get their freedom back. It is believed that scientists would develop more new techniques in the future to ensure the public to live in a fair justice system.

Works Cited

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