HISTORY OF FORENSIC MEDICINE & TOXICOLOGY

1985 Police in the UK first use forensic DNA profiling.

Kerry MULLIS discovers Polymerase Chain Reaction (PCR) method of replicating particular regions of a DNA molecule. 1986

Cetus Corporation, develops the PCR technique for a number of clinical and forensic applications. This results in development of the first commercial PCR typing kit specifically for forensic use, HLADQa (DQA1).

Edward BLAKE first uses PCR-based DNA testing (HLA DQa), to confirm different autopsy samples to be from the same person. The evidence is accepted by a civil court. This is also the first use of any kind of DNA testing in the United States.1987

UK, police use DNA profiling in PITCHFORK case to clear a 17 year old suspect of two rape-murders. Police collect blood samples from over 5,000 local men to identify the perpetrator, Colin PITCHFORK.

Robert MELIAS is the first person to be convicted for rape on the basis of DNA evidence.

DNA profiling is introduced for the first time in a U.S. criminal court. By RFLP analysis, Tommy Lee ANDREWS is convicted of a series of sexual assaults in Orlando, Florida.

New York v. CASTRO is the first case in which the DNA evidence was seriously challenged. It resulted in a call for certification, accreditation, standardization, and quality control guidelines for both DNA laboratories .1989

In the USA, Gary DOTSON becomes the first person to have a conviction reverted on the basis of DNA evidence. DOTSON has served 8 years of a 25 year sentence for rape.

Australia's first court case involving DNA evidence. In an ACT court, Desmond APPLEBEE is convicted for three sexual assault s, after a blood sample matches him to DNA extracted from blood and semen on the victim's clothes.

K. KASAI and colleagues publish the first paper suggesting the D1S80 locus (pMCT118) for forensic DNA analysis. D1S80 is subsequently developed by Cetus corporation as a commercially available forensic DNA typing system.1990

In Montreal, Integrated Ballistics Identification System, or IBIS, for comparison of the marks left on fired bullets, cartridge cases, and shell casings was launched. Subsequently it was developed for the U.S. market in collaboration with the Bureau of Alcohol, Tobacco, and Firearms 1991.

National Research Council Committee on Forensic DNA (NRC I) publishes DNA Technology in Forensic Science.1992

Thomas CASKEY, professor at Baylor University in Texas, and colleagues publish the first paper suggesting the use of short tandem repeats for forensic DNA analysis. Commercial kits for forensic DNA STR typing developed later.

National Institute of Forensic Science commences operations with an aim to develope national standards of quality control and accreditation of forensic laboratories throughout Australia. 1993

Roche Molecular Systems (formerly Cetus) releases a set of five additional DNA markers ("polymarker") to add to the HLA-DQA1 forensic DNA typing system. 1994

The world's first national DNA database commences operations in the UK on 10 April 1995. 1995

Rodney WINTERS is convicted of the rape and murder of a woman at South Australia's Edinburgh Air Force base 14 years earlier. After DNA profiling matches him to semen found on the dead woman, WINTERS confesses.

In the USA, mitochondrial DNA evidence is used in a court for the first time. Paul WARE is convicted of the rape and murder of a four year old girl after mitochondrial DNA profiling matches him to a hair found on the body of the child.

In the USA, the FBI sets up the National DNA Index System, enabling city, county, state and federal law enforcement agencies to compare DNA profiles electronically.1998

The FBI upgrades its computerized fingerprint database and implements the Integrated Automated Fingerprint Identification System (IAFIS), allowing paperless submission, storage, and search capabilities directly to the database maintained at the FBI.1999

In the UK, the Forensic Science Service announces that the number of DNA profiles of suspects and convicted criminals on the national DNA database has reached one million or roughly one third of the estimated criminally active population. 2000.