DNA ELIMINATION DATABASE: THE BRAZILIAN FEDERAL POLICE EXPERIENCE

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The recent technological development in genotyping systems allows the obtaining of interpretable genetic profiles from very small quantities of DNA. At the same time, the increasing sensitiveness has also the negative impact of detecting genetic profiles unrelated to the crime, such as those produced by contaminations from staff, both from crime scene investigators (CSI) and laboratory collaborators. Keeping this risk in mind, since 2010 the Brazilian Federal Police DNA Lab has conducted 12 trainings for CSI experts in order to improve collection practices at the crime scene and prevent contaminations. CSI are encouraged to donate voluntarily DNA samples with the aim of integrating a staff elimination database. At present, this effort has produced 365 submissions, of which 19 (5%) individual profiles have matched to 24 criminal cases. These results show how education, skilled labor and staff elimination database are important to prevent misunderstandings and waste of resources during investigations.