



Jurisprudence Section - 2016

F31 Two Worlds Collide: The Perspective of the Forensic DNA Lab vs. the District Attorney's Office and the Impact of the Errors Reported in the Federal Bureau of Investigation (FBI) Population Data

Courtney Head, MS, Houston Forensic Science Center, 1200 Travis Street, 26th Fl, Houston, TX 77002; and Inger H. Chandler, JD, Harris County District Attorney's Office, 1201 Franklin Street, Ste 600, Houston, TX 77002*

After attending this presentation, attendees will better understand the impact the amended FBI allele frequencies are having on a large metropolitan forensic DNA laboratory and the county's district attorney's office. Attendees will also have a better idea of the challenges associated with the amended data and the potential implications for the judicial system.

This presentation will impact the forensic science community as well as the legal and forensic DNA communities by introducing the different vantage points of the forensic laboratory and the key players in the criminal justice system.

The forensic DNA community has been worried about the potential impact on casework resulting from the FBI's amendment to the 1999 and 2001 Short Tandem Repeat (STR) population data. Some of the forensic DNA community may have also been concerned about the retroactive impact on completed casework dating back 15 years. The FBI has been quick to explain how the errors were discovered and the potential statistical impact. The changes in allele frequencies had minimal statistical impact; on average, the FBI anticipated less than a two-fold difference. Therefore, the changes forensically were expected to be minimal. The Houston Forensic Science Center's (HFSC) Forensic Biology Section decided previously completed DNA reports would be amended with updated statistics upon request. The laboratory did not intend to recalculate statistics on all DNA cases that used the FBI's 1999 and 2001 allele frequencies for statistical calculations. Meanwhile, the Harris County District Attorney's Office (HCDAO) was reviewing the FBI's report and contemplating the ethical and legal obligations in light of the potentially favorable, newly discovered evidence.

In all criminal cases, prosecutors have a duty to seek out and disclose all exculpatory, impeaching, and mitigating information in the prosecution team's possession. This long-standing obligation was first recognized as a constitutional due process right in 1963 by the United States Supreme Court in *Brady v. Maryland*. The Texas Legislature codified and expanded this with the passage of the Michael Morton Act in 2013. It continues beyond the final disposition of a case, and broadens *Brady* by requiring the disclosure of favorable evidence regardless of its materiality or admissibility. In essence, this means that all favorable evidence must be disclosed without exception.

With these obligations in mind, HCDAO recognized that all pending and disposed DNA cases would have to be recalculated. Thus, even the slightest change in statistics favorable to the defendant would be subject to disclosure. HCDAO initially requested this work on more than 100 cases. This seemed time consuming, but achievable. It appeared these cases would be simple: enter the data into the PopStats™ software, then type the new, updated statistics into an amended report; however, HFSC analysts quickly learned many of the requests involved cases that had been analyzed under different versions of the Standard Operating Procedures (SOP), interpretation guidelines had changed, chemistry had changed, and the laboratory personnel who had done the initial testing were no longer employed by the laboratory. Each of these issues impacted the ability to quickly amend a report. In some situations, all the scenarios applied, further compounding the issue and the report's timeliness. Interpretative changes also impacted conclusions. In some cases, new guidelines meant inclusions and statistics had to be changed, making the profile or mixture unsuitable for comparison. These issues created a new challenge for the HCDAO. Now prosecutors faced not only the potential of favorable evidence on all disposed and pending cases resulting from the amended population statistics, but also HFSC's changes to conclusions due to the revised SOPs and data interpretation standards. It was quickly realized that the seemingly "minimal" impact of the FBI's database errors could reach all disposed DNA cases from guilty pleas to jury trials, from probation sentences to death sentences. HFSC and the HCDAO found themselves grappling with the daunting task of case identification, mass *Brady* notifications to defense attorneys and defendants, record retention, and data mining.

Amended Data, Statistics, FBI